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ABSTRACT

The improvement of information infrastructures in the eastern and southern sub-region of Africa through the adequate training of personnel for libraries and information establishments is one of the major objectives of the Education, Science and Documentation Centre of the German Foundation for International Development (DSE). This reader, designed to be useful for the training of students in librarianship and for in-service training of staff in libraries and information centers, contains eight articles covering various aspects of librarianship and documentation: (1) "Continuing Library Education for Social Change" (J. Reece); (2) "The Role of Libraries and Documentation Centres in Research--A Case for Kenya" (W. O. Ochiengh); (3) "The Legal Deposit System in Kenya" (N. Kamau); (4) "User Education--A Critique" (E. W. Muya); (5) "The New Information Technology and the Book Professionals--A War of Survival" (S. Ouma); (6) "The Problems and Conservation of Library Materials" (E. W. Muya); (7) "Library/Information Manpower Survey in the Sudan" (C. Wesley); and (8) "Types of Educational Programmes in Zambia--Role and Relevance" (O. N. Mohamedali). Appendices include guidelines for authors interested in contributing to future volumes and a bibliography of DSE publications on information and documentation. (KM)

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Lutz Hüttemann (Ed.)

LIBRARIANSHIP AND DOCUMENTATION STUDIES

A HANDBOOK OF TEACHING AND LEARNING MATERIALS

VOLUME 2

Bonn, September 1986

DOK 1310 C/a

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A Handbook of Teaching and Learning Materials

Volume 2

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LIBRARIANSHIP AND DOCUMENTATION STUDIES

A Handbook of Teaching and Learning Materials

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INTRODUCTION

The publication of genuine African teaching and learning materials in the field of information and documentation has been one of the main preoccupations of DSE since the establishment of short training courses and seminars for library, documentation and archives personnel for the Eastern and Southern African sub-region in the mid-seventies. The reports of our training courses are already considered as a valuable source for supporting educational activities of the library schools all over the sub-region and beyond. At the same time, these reports serve as self-teaching materials for all those professionals who were unable to participate in the training courses.

In 1985, the publication of the first volume of this handbook and the pilot edition of the document "Introduction to Librarianship and Documentation" (the latter published jointly with the University of Botswana) was yet another achievement of DSE's commitment towards the training of information personnel at the para-professional level. Both publications were widely recognised among practising librarians and documentalists and most welcomed by the library training institutions in Africa. Now, we are pleased to publish the second volume of the handbook, again containing contributions from professionals from the sub-region. The members of the Editorial Board assumed that the articles will be useful for the training of students in librarianship and for in-service training of staff in libraries and information centres. The final version of the second document mentioned above is expected to the published in mid-1987.

Like the first one, this volume 2 of the handbook offers a variety of articles covering several aspects of librarianship and documentation. During the meeting of the Editorial Board in August 1986 in Gaborone, it was felt that future volumens should concentrate on special subjects of the information professions. It was decided that volume 3 of the handbook will emphasize on contributions about

"Services to Major User Groups", due to be published in September 1987. Articles may be submitted to any member of the Editorial Board until 15th of April, 1987. The "guidelines to authors" are reproduced as annex 1 of this document.

Our readers are notified that the papers contained in this volume represent statements of personal opinions of the author and do not necessarily reflect the views of Governments, employing institutions, the editor or the publisher.

The improvement of information infrastructures in the Eastern and Southern African sub-region through the adequate training of personnel from libraries and information establishments remains one of the major objectives of DSE for the foreseeable future. We believe that our publications programme contributes considerably to achieving the desired results, and we shall continue our efforts to provide a forum for African professionals to express their views and opinions.

Lutz Hüttemann Bonn, August 1986

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CONTINUING LIBRARY EDUCATION FOR SOCIAL CHANGE

by J. Reece

INTRODUCTION

In this paper an attempt has been made to define continuing education as a general concept and in its application to librarianship in sub-Saharan Africa as a region where rapid socio-political and economic changes are being attempted. The paper examines the provision of further education within the region and the nature of the opportunities available for librarians both within and outside the region. Some assessment of the relevance of the various methods used to continue the education of the librarian is made and some suggestions for consideration in attempt to make more applicable the contents of courses, conferences and exchanges in a dynamic social environment. The paper is intended to raise questions rather than answer them and it is hoped that discussion on the nature of continuing education opportunities might arise from it.

DEFINITION

Continuing education is generally defined as a learning process which takes place after formal education has been completed. The FAURE REPORT (which presented the findings of the International Commission on the Development of Education in 1972) stated that continuing education was "the master concept for educational policies in years to come for both developed and developing countries".[1] This idea was further explored by the UNESCO Institute of Education and the DAVE REPORT: "Lifelong education and the school curriculum" (1973) which emphasised the advantages to both individuals and society in its statement that lifelong education was "the highest form of self-realisation" as well as a "potent instrument to

keep up and accelerate an all-sided development by the creative participation of individuals in a changing society".[2]

Jones, in surveying patterns of continuing education in England and the United States, within the library profession, is more explicit and defines the process as "responding to

a) the need for personal development, for people in the professions to grow intellectually and emotionally.
b) the need for economic expansion or diversification, for people to prepare for new jobs, new responsibilities.
c) the need for vocational development, to offset gaps in knowledge and experience.
d) the need for social maturity, for people to respond to changing roles in their professions, and develop social skills necessary for relating to their user communities."[3]

Despite the Western bias of the studies quoted to define continuing education, the principles are, I believe, applicable in sub-Saharan Africa where the theories have been endorsed by many African states and leaders, notably Nyerere[4], whose commitment to lifelong education and the integration of formal and non-formal methods of learning is well known. Throughout the sub-continent the theory of continuing education has been linked with development projects and an overall aim at increased self-reliance amongst peoples in post-independent Africa irrespective of the political differences of governments.

CONTINUING EDUCATION FOR THE LIBRARIAN IN SUB-SAHARAN AFRICA

That education has not been completed at the termination of school or university learning, is clear; the fact that much of that education, for practising librarians in the sub-Saharan region, has taken place within a socio-political environment quite different from the one in which they are working at middle and senior management levels as

decision makers and policy makers within the realms of library provision needs to be considered. So, too, does the rate at which many of the social changes in the region are being effected and their importance to the planning and implementation of library and information policies.

This would, then, joint towards a recognition of the shortcomings of library education and the necessity to formulate new approaches in library education appropriate to the 'new societies'. To some extent this has already been attempted: over the past ten years library schools have emerged in Botswana, Zambia, Uganda and Zimbabwe. This is not a solution in itself but does provide an educational environment which is likely to allow exposure to the realities of library science rather than one in which, as Benge comments, "a body of knowledge is assumed to be universal and then an attempt is made to apply it to individual local circumstances. If neither the theory nor the practice fits the environment then it is hoped that one day they will all correspond - for example, that all the people will become literate."[5)]

To overcome clumsy adaptations there needs to be, of course, much more than a local provision of the same courses and syllabi offered in developed countries. There have been clear attempts made at this and the inclusion of such subject areas as 'Rural development and libraries', 'Libraries and national development plans' and 'The book trade in Africa' will hopefully make library education a more relevant preparation for the realities of working in the sub-region.

That is very well, then, for the new diplomates and graduates in the library profession in the region but it points to another problem: not only are these libraries unlikely to have senior positions in the library services of the region for some time but there is a greater disparity than ever between the education and ideas of the librarians themselves.

A positive approach would be to accept that, through dialogue and discussion and a willingness to share power and authority by those

in senior positions, a balance of some kind will be struck and hopefully, a compromise reached. This, in a continent where changes in education programmes occur with enormous impact and very rapidly (mass education programmes implemented in Zimbabwe in 1980 will necessitate absorption of 2,600,000 school leavers by 1996 into the employment market[6]) has implications for library services which have never been considered before; there is not a country in the sub-region without a literacy campaign of one sort or another and the implications that brings for the librarian in terms of staffing and location of service points before the problem of forms and levels and languages and content of the materials required to support these campaigns is even considered is enourmous. Where wide changes have taken place in the political structures and ideologies these, too, affect the services offered and it is not only the public library services which are affected. University libraries are affected in a very direct way by the expansion of the education programme but also in response to the nationalist demands of provision of materials by local researchers, on locally relevant subject areas. Chung and Ngara have been scathing in their comments on this: "if university students cannot refer to research and books published by their own nationals about their own environment but are always forced to translate the findings of foreign researchers and apply them to the local conditions, then what claim does such a university have to the name of a university? Such a university suffers from intellectual kwashiorkor, from the disease of underdevelopment."[7]

To hope that the changes and pressures, such as the few outlined above, can be solved by dialogue and discussion are, I think, foolishly optimistic and little more than counselling despair. Continuing education for practising librarians has, then, one obvious direction: that of exposing the librarian, already trained and occupying positions of authority, to these new concepts of library education and preparing him for new social developments and ultimately effective provision of services to a changing usership.

This, I believe, is the only way in which the gap can be bridged. There are others who would disagree, believing that an education,

given in whatever social climate is sufficient and can be appropriately adjusted to local needs at the point of implementation, particularly if the librarian himself is part of that local environment. If that were the case, and I believe it not to be, there would not exist the gaps between service and user which is the main concern of the librarian in the sub-region today.

PROVISION OF CONTINUING EDUCATION

In considering the vital need for continuing education for reasons of social change, for professional fulfilment and the effective execution of new responsibilities within such an environment, it is useful to look at the methods of continuing education and the provision made within the sub-continent for such programmes.

The methods by which continuing education can be divided are:

1. Research programmes leading to higher degrees.
2. Taught courses leading to higher degrees.
3. Short courses not leading to further qualification.
4. Enhancement courses enabling librarians with existing qualifications to obtain degrees/diplomas.
5. Summer schools on particular topics/subjects.

To consider these in turn:

Research leading to higher degrees/Taught courses leading to higher degrees

There are plans to offer a higher degree programme at the University of Botswana, Gaborone. This is the only local opportunity of library science study at this level and the usual method of obtaining higher degrees is through sponsorship by an aid organisation for courses offered - usually in the United Kingdom, the United States or Canada.

Taught courses in these environments offer the same opportunities and limitations as the initial training programmes and therefore, for purpose of adaptation of existing knowledge and provision of education within a relevant socio-political environment, is restrictive. Research leading to higher degrees has an amount of flexibility which enables the candiate to select his own area of research and thus anchor its relevance firmly in the problem and realities of the local environment. Supervision of such programmes may present problems but this is largely the concern of the host library school.

Short courses not leading to further qualification

Included in this category are courses on particular areas of library and information work e.g. aspects of management; community information services; use of a new edition of a classification scheme. The provision of such courses, where existent, appears to have been by either national professional associations or by regional associations, often sponsored by an aid organisation. The nature of the short courses which have been offered have been library oriented and the lecturers on the courses either local senior professionals (which would suggest an audience of middle management level staff) and/or 'library experts' from developed countries.

Enhancement courses enabling librarians without existing qualifications to obtain degrees/diplomas

This is a problem current in the region and the provision of appropriate courses is negligible. With the exception of the correspondence courses offered by University of South Africa, there is no course available through either distance education, accreditation of units by short-course attendance accumulating into full qualification or day release study at this level.

This absence of provision is important in a region where opportunities for full-time courses in library and information science have been very limited with the existence of few library schools in the region and with sponsorhip for first degree programmes increasingly

limited. It is also important to recognise that here fall the majority of the practising 'librarians' in the region for many posts are held by those who have had no other library training than in-service or 'on-the-job' training and are generally mature workers for whom three or so years without financial support is out of the question.

Having considered some of the main forms of continuing education provisions mention must be made of the various, and more available, methods of informal continuing education: Summer schools, like short courses tend to be subject oriented training courses aimed at furthering exchange of ideas, practices between professionals as much as formal training. Summer schools have been held at the University of Botswana, Gaborone in such a manner. Attendance at overseas summer schools, notably these held at the College of Librarianship Wales, Aberystwyth, is sponsored by aid organisations for participants within the region and can also form part of qualification enhancement courses by the accreditation system.

There are many other, informal, methods of continuing education which are, generally, more available within the region. These include informal discussions with colleagues, staff meetings, visits to other libraries, conferences, meetings, holding office in professional associations, writing for publication in professional journals, reading professional literature, the presentation of papers at conferences and meetings and playing an active role in the politics of the employing institution.

ASSESSMENT OF EXISTING PROVISION

The provision of formal continuing education opportunities in the region is very limited although promising new developments such as the further degree studies at the University of Botswana imply a change in the emphasis upon further degree studies outside Africa. One of the main problems here may be in securing sponsorship or paid leave for the requisite periods of study given that the majority

sible than undergraduates.

The formal continuing education opportunities are less limited although more difficult to ensure appropriate content given that they exist outside the region and it is generally the case that all opportunities outside the region emphasise the library skills and management areas which poses another problem of relevance. As Benge points out: "Management theories are ethnocentric and when applied to developing countries simply obscure social realities", Benge continues to use the example of "corruption" as one which is simply ignored in management theory yet it is in reality a double system which operates to enable official bureaucratic machinery to function properly rather than a condemnatory practice "As in the case of economic 'laws' the principles when transformed to a different environment are not wrong but irrelevant, and education which ignores the differences in social reality has not been indigenised; it serves to promote further mystification."[8)]

On assessment of informal continuing education programmes there is less chance of irrelevance particularly when the participants of, say, a conference bring their own experiences to the subject in question and make the subject relevant to some extent. Conferences, papers at meetings, papers for publications are invaluable means of continuing education yet here, too, problems emerge in another aspect of irrelevance: that of the tendency of participants to present a catalogue of achievements and sucesses, leaving out the learning aspect of those achievements: the false attempts, the staffing crisis arising out of the new services and so on. It is understandable and right to be proud in national achievements but unless the ensuing problems are outlined and shared, the errors are bound to be repeated. Visits to other library systems and informal dicussions with colleagues are invaluable in continuing education and there is, I believe, much more to be gained from such methods. Similarly, exploiting the attendance of one or a few members of staff who have been able to attend formal continuing education programmes by their presentation of reports and insights at staff meetings (the same can

also be done for a wider audience, through professional association meetings) is an easily arranged activity and one which has a wide reaching effect.

Finally, the active participation of the librarian in the politics of the employing institution whether this is a local community or private organisation can be a useful role in continuing education as well as having beneficial effects in making the library more relevant to the various changes taking place in the community and in effecting a public relations activity.

Less attention is paid, perhaps to the informal education processes because they do not have international recognition (nor even regional) and are not status related activities in the same way as participartion on a course of study or summer school programme is. However if the general principles of continuing education are to be seriously considered it is through informal procedures rather than formal ones that the practising librarian is likely to find practical solutions to his problems. In bridging the gap between locally trained and foreign trained librarians and in assisting the latter to retain professional relevance in a changing soical environment informal networks and conferences can aid but do not, in my opinion, replace short courses in areas of new developments, political changes and attitudes offered by non-library organisations. The concept of re-education in areas where previous training has been wholly or largely inappropriate in one which has not been fully examined in professional education in the region; if considered it would need to be a national initiative and to take as its areas of concern not only new national policy issues and legal amendments and changes but information about society and culture, political theory and awareness. In other words, it is not advanced cataloguing, bibliography and management theories which are sorely needed but education in those areas which Goode defined as the characteristics of a profession:

i) prolonged specialised training in a body of abstract knowledge;
ii) a collectivity of service orientation.

In clarifying the latter Goode continues that "service orientation means that the professional decision is not properly to be based on the self interest of the professional but on the need of the client".[9)]

Ultimately it is the practising qualified librarian who calles the tune for he is the one who already holds positions of authority and is able to express his needs for professional education to national and international bodies. In order to respond to changing social conditions it is the practising librarian who either makes do or rises to the challenge of social progress and ultimately it is individuals who make progress, not governments and this "entails a transformation of nature, human beings and society. The transformation of nature and society depends on the remoulding of people so that they can fully realize their capacity to change their environment and existing social conditions".[10)]

SUMMARY

The main points raised in the paper are:

i) the importance of continuing education to the practising librarian
ii) the methods and opportunities for librarians in sub-Saharan African to continue their education
iii) the social context within which practising librarians are working in sub-Saharan Africa
iv) the inadequacy of traditional library education in preparing the librarian for social change in the region
v) the suggestions that more local continuing education may be developed on an informal basis between library services and individuals
vi) the suggestion that non-library authorities take on a role of educating the practising librarian in areas of political, social and economic change and the development of corresponding attitude changes.

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THE ROLE OF LIBRARIES AND DOCUMENTATION CENTRES IN RESEARCH: A CASE FOR KENYA

by W.O. Ochiengh

The usefulness and effectiveness of research depends very much on the quantity of information sciences in a country. Every research organization regardless of size should have an information centre (e.g. Agriculture Information Centre) to feed both the organization's services and its staff. This paper, therefore, defines research and highlights the relationship between research and information services. The activities are discussed. The great mass of information embodied in documents of various forms and dimensions have created problems to librarians and information officers, and also researchers who need information to further their research. These problems are discussed and possible solutions suggested.

INTRODUCTION

Research is defined by the New Oxford Illustrated Dictionary to mean careful search or inquiry, endeavour to discover facts by scientific study of a subject cause of critical investigation[1)]. In other words it is a scientific method of probing the causes and or remedies of a particular problem. The primary purpose of research in any discipline is to discover answers to questions through the application of scientific methods. These methods have been developed in order to provide answers to the questions asked which should be reliable and unbiased. Research always start from a problem or short question of some sort e.g. How best can we control insects without using chemicals? What causes cancer of the cervix? What are the causes of parking boys in Nairobi? The answers to such questions are difficult to provide unless the question is investigated through research. While all research is oriented towards seeking answers, it is not feasible to conduct successful research without the provision of relevant data.

This presupposes that for the success of any investigation, a procedure for gathering relevant information has to be devised. However, information can only be easily supplied through an efficient information service. Providing information services are libraries, documentation centres, archives, museums etc., because their functions regarding research are very similar if not the same. One is tempted to discuss them under one heading Information Centre. What then is an information centre and how does it service research programmes? In the context of this paper an information centre can be taken to mean a collection of both printed and non-printed materials housed, organized and interpreted to meet the varied needs of users for information.

Information centres especially those that service researchers are established on the basis of a specific discipline or a particular institution and perform the following functions among many others: acquisition, document analysis (abstracting and indexing), selective dissemination of information, current awareness service, literature searching, translations and referral service. In any research institution, there should be an information centre to perform these activities. Although information centres are known to serve researchers, they also depend on researchers for production of information.

RELATIONSHIP BETWEEN DOCUMENTATION ACTIVITIES AND RESEARCH

Libraries and documentation activities of any country are very much interlinked with research and development of the country. In any developing country including Kenya, research and developmental programmes are funded by the government. Libraries and documentation activities too depend on state funding and other kinds of support. When discussing the role of information centres in research one may be tempted to mention that the growth and development of any research activity largely depends upon size and quality of information and documentation services. When organizing such activities, information is needed about what has been published earlier in

the same field. Secondly, researchers need to know the existing ideas and results, and this is particularly important when needed information is to come from many subject fields and sources.

In Kenya the association of libraries and research activities date back to pre-independence time. For example the colonial government had established research institutions like Agriculture, Veterinary, Geological, National History, and Fisheries as far back as 1920, to collect and store information on natural resources. However, organised research started after independence, with establishment of the University of Nairobi. Realising the great contribution of research in enhancing development, Kenya Government established the National Council for Science and Technology by an Act of Parliament in 1977 to ensure that research is facilitated, oriented or initiated according to national needs. According to the Science and Technology Act (CAP 250 rev.ed) of 1980, Part II Section 4g, NCST is supposed to consider and advise generally on all scientific activities, including:

- the application of research results;
- the transfer of technology into agriculture and industry;
- scientific and technical manpower (active and potential);
- scientific research and technology;
- science education (not only at the advanced level in respect of the quality and quantity of potential manpower training)
- scientific documentation, statistics, survey and general information[2];

through its four Advisory Research Committees (ARC) namely: Agricultural, Medical, Industrial, and Natural Sciences. NCST plays an advistory and coordinating role in all research matters in the country, with the aim of utilizing the meagre resources properly.

The Act lists five institutes with various fields of research to be undertaken, namely: Kenya Agricultural Research Insitute (KARI), Kenya Tryponosomasis Institute (KETRI), Kenya Industrial Research and Development Institute (KIRDI), Kenya Marine and Fisheries Research Institute (KEMFRI), Kenya Medical Research Institute (KEMRI)[3]. Other research areas include forestry, population,

education, and energy. Obviously these programmes are aimed at alleviating poverty, improvement of quality of life and the provision of basic needs of Kenya. NCST has a division known as National Documentation Centre whose function include the collection of scientific information generated in the country and elsewhere, and the dissemination of research results among others.

SPECIFIC ACTIVITIES CALCULATED TO PROMOTE RESEARCH

The sources of information are both printed and non-printed materials. Printed materials include books, periodicals, pamphlets and ephemeral materials. Sometimes, a researcher may need to use non-book materials such as microfilm and cassettes. The following facilities and services are provided by information centres in order to promote research:

(a) Physical Facilities

Information centres provide furniture: storage facilities for materials and working space for researchers. We all know that most homes are not conducive to study and research, as very few researchers have the advantage of conducing research near their place of living. In a quiet atmosphere of serious reading activity, with all the materials near at hand and the presence of people who are ready and duty-bound to give help and assistance whenever required, information centres provide a highly conducive atmosphere for research. In institutions where money is not a constraint library buildings are being designed with noise-proof floors, air conditioning devices and private carrels. Sometimes carrels are provided with locking devices to enable scholars to keep their materials together in a manner that sustains their trend of thought until they have finished their particular research.

(b) Selection and Acquisition of Materials

In scanning bibliographies which include national, subject and trade bibliographies a librarian is trying to locate materials which can provide relevant information as much as possible. In university or special libraries, research constitutes the basic function. In the case of public libraries research function is an additional activity. In order to build a balanced stock, researchers are encouraged to suggest materials which are deemed relevant to the research programmes being undertaken. They include books and periodicals, and an access to other media such as audio-visuals, particularly microforms, microfilms and microfiche. Research sources such as newspapers and archival materials are often made available in microform.

(c) Organization of Materials

Materials acquired have to be organized in such a way as to facilitate their storage and retrieval. Information scientists have advised local groupings of materials according to their degree of similarities and otherwise through tools called classification schemes. Classification schemes are useful aids to literature searching by subject and this is logical because most research is subject - oriented. Alongside the classification process, is always the process of cataloguing which provides author, title, and details about the material. How much cataloguing details may be provided often depends on the type of information centre and its users. It stands to reason, therefore, that high level of use of information in research very much depends on greater bibliographical description of a material.

(d) Information Storage and Retrieval

The natural result of cataloguing and classification is the product of a store of information about each topic required. This usually takes the form of a catalogue which provides all possible access to an item by author, title, and subject. It is for the individual researcher to

select his own access points, according to his needs. The most common catalogue format is the card. With information explosion analogous to population explosion, information centres have given away the manual systems for machinepunched cards, operating on the peeka-boo principle of information retrieval. This has been superseeded by electronic devices such as the computer. Many libraries and documentation centres in Kenya have yet to acquire the services of computers. Non-manual devices have been found to be speedier than any manual system in retrieving information. For this reason and in order to satisfy the needs of researchers, librarians have moved alongside information technologists in order to serve researchers as speedily and efficiently as the services permit. The catalogue card production and manual card filing accentuate delays in informing researchers about materials which have lately arrived in the library. The computer overcomes these problems by its ability to arrange entries and produce lists at electronic speed in both print and microform. In addition to minimising clerical work, the computer provides data banks by means of on-line computer terminals. Unfortunately, most of Kenyan libraries and information centres have not acquired this technology. Consequently Kenya cannot tap the information resources of well known data bases e.g. AGRIS.

(e) Selective Dissemination of Information (SDI) and Current Awareness Services (CAS)

The changing role of information centres from passive to an active role in order to meet needs of researchers has forced it to adopt a more aggressiive information policy. Instead of waiting for users to visit information centres most special libraries today have lauched programmes which keep their users informed of what the library has lately received. This is often referred to as current awareness of service (CAS). It aims at drawing the attention of researchers and other library users to materials currently available in the library, and other types of information centres. CAS devices consist of accession lists, display of new books or their jackets, current periodicals contents, indexing and abstracting services. Depending on

the level of usage and the nature of its library, an information centre may establish an information service which has contacts with individual readers through their user profiles. This is known as Selective Dissemination of Information (SDI). This kind of service is particularly popular in special libraries or documentation centres where the results of research contained in publications have to reach members of a research team within the least possible delay. An example of a successful information service in a key research area is that provided by Kenya Agriculatural Institute Library, Muguga, formerly East African Agriculture and Forestry Research Organisation: Copies of table of contents of leading periodicals in areas of interest are sent to users (researchers).

(f) Reference and Bibliographic Services

Information Centres do not stop at building and developing resources, organizing them and devising retrieval tools. It is also their duty to guide users through the mass of their collections. Their basic function here is that of reference, where answers are given to queries raised. A researcher or any other user may present a question such as "I am looking for information on the causes and remedy of hypertension; do you have any information on this?" Such queries are very demanding and cannot be answered using one source. The search may be extended even to other information centres locally and abroad. In order to handle these questions well, it becomes necessary at times to compile lists of subject bibliographies. The responsibility for bibliographic efforts rest squarely upon library personnel if research activity is to be facilitated and rendered less burdensome.

Library cataloguing, though one of the traditional tools in information storage and retrieval methods, tend to offer passive assistance to researchers. But researchers need to be more adequately dealt with by using bibliographies that match projected uses or an answer to requests. Information centres also acquire commercially produced bibliographies particularly bibliographies of its own country

for example Kenya National Bibliography produced by Kenya National Library Services. In addition to book-selection function, these bibliographies also enable the researcher to locate materials relating to his field of study and verify bibliopgrahic details. In any literature search, a bibliopraphy is the starting point.

In addition to bibliographies, information centres acquire abstracts and indexes whose primary function is to provide access to periodical articles. Without them, the location of journal articles would be a clumsy and very incomplete business. The special library usually may index selected articles from a monthly or quartely consignment of periodicals received, and place them at the disposal of research teams long before they are discovered by commercial abstracts and indexes.

(g) User Education

Researchers use the information storage in information centres to generate more information as a basis for further research. They need, therefore, to develop certain skills through training programmes or through a series of direct and indirect activities calculated to inform users not only where, but also how to locate information. These activities constitute a concept called user education. Activities may consist of educating users in the use of bibliographic sources such as reference books, bibliographies, abstracts and indexes. This is particularly important in a large library system (e.g. University Library collection). If this initial snag is not overcome in time, research becomes a frightening experience and students in particular feel scared.

(h) Library Co-operation

Without some kind of co-operation between information centres, the requirements of readers particularly researchers would be severely limited. Research itself is becoming increasingly dependent upon

group efforts. The most obvious arrangement is that of national networks by which information centres devise schemes of co-operation storage, exchange and interlibrary loans. Most of the schemes of co-operation serve merely as back up services to the central spirit of co-operation among libraries-interlibrary lending. The virtue of inter-lending depends on the speed with which it can be carried out because the time factor is a very crucial factor in research. In Kenya this service rests on the gentleman's agreement, that is the mutual confidence and trust between participating libraries. Unlike in developed countries where international lending libraries make use of a variety of technological devices such as the telex and computers, in Kenya, postal communication is used.

When discussing resource sharing in any African country, it may be necessary under this sub-heading to mention that the United Nations Economic Commission for African has established the Pan-African Documentation and Information System (PADIS) for the entire African Continent and its hopeful forecast is that by 1988 national centres will have been established in all African countries.

(i) Registration of Research (on-going and completed)

It is desirable of information centres to register on-going and completed researches. This helps researchers to keep up with their special fields of interests, know how far such research has been done and, therefore, avoid repetitive research, involving waste of time, and leading to stagnation. Information on what is being worked today or planned for tomorrow is valuable to the researcher. This function is performed by National Documentation Centres. In Kenya, the National Council of Science and Technology Documentation Centre has been fulfulling this role.

(j) Translation Service

English is not the only language in the scientific and technological field. Other languages such as Russian, Japanese, German, Spanish, and French are important. The problem of language barriers in the dissemination of information is one of the tasks that information centres handle. The commonest method of surmounting the language barrier is by an efficient system of interpretation of texts in foreign languages through translation into kown languages, as most researchers experience difficulty in comprehending works published in foreign languages. The fact that Translation Centres have been set up in a number of developed countries explains the importance of translation services in research work. In Kenya a translation centre is still lacking. It can be hoped, however, that the government would soon set up one.

(k) Library - Oriented Research

The complex and dynamic nature of scientific and industrial research have given rise to additional tasks for information centres to review their methods and change their techniques from time to time. This is attained through research into the various aspects of library service. The library pervades all research without loosing sight of the fact that in its own right, it is a distinct discipline on which studies must be undertaken in addition to its own service role. Conversely, it is the service role that stimulates research, carried out in the library profession. Those researches are carried out in order to improve efficiency of information personnel. A great deal of research taking place in information centres include management techniques for better planning of library services, user studies for better understanding of the behaviour and the needs of the research community etc.

(I) Publication

It has been discussed in the preceeding paragraphs how all research pivots around information centres. It supplies the resources of the libraries of other countries and acquires the finished products that may be used as locating tools for further research. J.H. de Vleechauwer when discussing the university library said its role is not directly creative, but we must appreciate the important role played by the library in connection with work, bibliographic reconnaisance, auxilliary scientific equipment and service, technical preparation of the publication and the distribution of all research done[4]. This confirms the claim made earlier about the activities of individual information centres as well as the constellation of information centres in order to facilitate research and its publication.

PROBLEMS THAT MAY AFFECT THE ROLE OF INFORMATION CENTRES IN RESEARCH AND POSSIBLE SOLUTIONS

While research has long been recognized as a vital activity for Kenya's development and thus the preparedness of the government of Kenya to provide information services to researchers, there are a number of constraints which have effected and continue to hamper the quality of information services. These include lack of financial resources, absence of an information policy, inadequate trained personnel, poor dissemination of research findings, inadequate communication infrastructure, absence of appropriate locating tools to mention only but a few.

One is tempted to mention financial contraints firstly. The financial allocation for information services regardless of what organization they serve still remains very often inadequate. As a result of inadequate fund allocation, many information centres have tended to rely on donations as a method of book acquisition. In this regard mention must be made of international agencies which have generously given book grants to a number of libraries in the country.

Secondly shortage of trained manpower has persistenly affected the government efforts on information services. The main cause of this problem is inavailability of training facilities in the country especially at the professional level. It is worth noting that where professional training is concerned British Council, German Foundation for International Development (DSE) and USAID have been very important in the training of Kenyan librarians. With the introduction of M. Ed. Courses in Librarianship at Kenyatta University and the establishment of the Faculty for Information Sciences at Moi University one hopes that these problems will soon be solved. It is most encouraging to note also that the training of non-professional Library and Archives Assistants are offered locally at the Kenya Polytechnic.

Thirdly, although Kenya has accepted the idea of setting up a national information system, practically there is still lack of an information policy, despite it being one of the important prerequisites to the establishment of a national information system. Lack of information policy has, therefore, resulted in duplication of efforts and waste of resources. For example, information centres based in various government ministries are existing without any coordination. The question of the absence of an information policy is serious because its is only through such an instrument that an information industry can be developed. But one hopes that this policy will be considered soon for establishment by an Act of Parliament and when established it should provide the following remedies to bridge the gaps:

- Direct investments in the information industry;
- Royalties of copyright and translation right;
- Enhance training of information personnel;
- Assist in the establishment of better and more training and education facilities in all fields to create an information consciousness;
- Provide research quidelines in matters pertaining to information and communication.

In addition, it is important for our decision-makers to recognize that national development is hampered if too much restrictions are put on

government reports of emphemeral nature and on consultancy documents.

Fourthly, the research centres in Kenya are scattered throughout the country. The remoteness of these centres in itself poses a great problem in communicating information and in keeping them abreast with up-to-date information in their fields of research. Libraries and Documentation Centres are sometimes separated by long distances. Thus it is practically difficult to make maximum use of materials of libraries located in Nairobi, especially where a researcher may need urgent information which in most cases is not available at the place where the research is being conducted. Poor transport services and unreliable telephone and postal services in some parts of the country inhabit rapid flow of information and personel access to other services.

Further, complexity of subjects forms one of the difficulties experienced by both the researchers and the librarians in Kenya. Globally it is known among information workers that no book, journal and let alone an individual paper merits only a single classification number. Consequently, information seekers, and especially researchers who are in most cases interested in specific information have and continue to experience difficulties in locating information. It is, therefore, the responsibility of all librarians to try and minimise the problem by designing appropriate locating tools. In addition, there is a need to train users in literature search so as to exploit the materials fully.

Another point also worth highlighting is information explosion. In Kenya like the rest of the world, investment in research has increased tremendously during the recent years. As a result of the high output of information, especially in scientific fields such as agriculture, it has become difficult if not impossible for Kenyan researchers and information workers to cope up with the literature. Considering the amount of information produced locally and elsewhere in the field of agriculture alone, it is not far from truth to say that Kenyan researchers probing agricultural problems would require a

life time to read all the literature generated annually. Therefore, librarians are called upon to save the researchers from getting lost in the overwhelming mass of information by selecting and supplying those publications which are of special importance to various categories of researchers.

In addition to information explosion and other factors which have already been identified as impediments that affect the dissemination of research results, it is an open secret that whereas a lot of information is relayed from agricultural research stations to consumers, only the elites benefit. As a result of this imbalanced supply, the small scale farmers have until today not realized the importance of research in the development of our country. The farmers who have been questioned in this subject have pointed out that the transfer of technical information in the agricultural sector is rather poor. Atherton has given an idea that the gap in information accessibility and use needs to be abridged in developing countries if economic progress is to be sustained. Having identified the communication gap between the farmers and agricultural researchers, it is necessary to note that although the librarian is not necessarily a subject specialist, it is his responsibilty to ensure that the two parties communicate effectively.

A study of existing information and bibliographic control in Kenya reveals two areas which require attention. The first is that it is not very easy to know what and where a specific information is available, since there is no centrally located comprehensive record of the holdings of Kenyan libraries and information centres. Although Kenya National Library Services has accomplished a great deal since 1982 in gathering information about publications produced in Kenya and by Kenyans, much still remains to be done, especially considering the fact that the Kenya National Bibliography which they put out is general in coverage. The second is that Kenya still lacks a complete record of ongoing research and those to be undertaken. But it is worth noting that accessibility to information on the kind of research projects being undertaken, accomplished etc. is a matter

which the National Council for Science and Technology is attempting to handle.

SUMMARY

It can be deduced from what has been discussed that the crucial issue for librarians and information officers, and also researchers, is that research findings should be communicated to consumers of knowledge accurately and promptly. It is clear that the Kenyan Government is keen to develop the country scientifically. Since scientific and technological development calls for a concerted effort in research, there must be well established information centres to supply scientific and technical information to researchers and other categories of users. This means that there should be an information policy to ensure that whenever research activities are planned, provision for appropriate information is made. The information explosion and transfer have brought a number of problems for librarians and information workers who have to serve the research community. Therefore, the government's total commitment is needed to train more professionals in new methods of information handling and equip them with necessary working tools. Lastly, Kenyas decision makers must appreciate the value of information services and recognize that national development is not helped if unnecessary restrictions are placed on government reports or consultancy documents.

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THE LEGAL DEPOSIT SYSTEM IN KENYA

by N. Kamau

The Legal Deposit System in Kenya started during the British administration system, with the passing of the Books and Newspapers Act in 1962 (Revised) 1980, Cap. III of the Laws of Kenya. The Books and Newspapers Act commonly referred to in Kenya as the Legal Deposit Act is an

> "Act of Parliament to make Provision for the registration and deposit of books and newspapers for the execution of bonds by printers and publishers of newspapers and for matters connected therewith"[1)]

Under the Act, the publishers of every book printed and published in Kenya is required

> "before or within fourteen days after publication of the book, at his own expense deliver to the Registrar such number of copies thereof, not exceeding three in number as may be prescribed together with a return in respect thereof in the prescribed form containing the prescribed particulars and signed by him"[2)]

The above condition applies also to newspaper publishers except that newspapers are to be deposited everyday the paper is published. The number of copies to be deposited for newspapers and supplements are two unlike three copies for books. All the copies deposited with the Registrar

> "Shall be kept for the purpose of records in such a place or manner or otherwise dealt with and disposed of in such manner or for such purposes as may be prescribed"[3)]

The present practice is that, after registration, the Registrar usually keeps these copies for some time and then distributes them as follows:

- University of Nairobi: 1 Copy
- Kenya National Library Services: 1 Copy
- Kenya National Archives: 1 copy.

THE ROLE OF A LEGAL DEPOSIT

One of the major aspects of the Legal Deposit is to enable any given country to produce a national bibliography. A comprehensive national bibliography enables the citizens to be aware of all the recorded knowledge the country has produced in various forms. A bibliography is also supposed to give enough details concerning a particular publication to assist in its acquisition by those interested. A national bibliography exercises control by showing the tpye of literature produced by a country at a certain period of time. It can, therefore, act as a source for publication statistics. To assist in the compilation of a national bibliography, there should be a compulsory deposit of materials produced in a country. These materials should be deposited in a designated institution charged with the responsibility of producing a national bibliography. In Kenya, the National Reference and Bibliographic Department of the Kenya National Library Services is charged with the responsibility

> "to publish the national bibliography of Kenya and to provide bibliographic and reference services"[4].

Considering its importance in the various ways, the national bibliography should always be current so as to assist especially Acquisitions Librarians in ordering new publications.

EFFECTIVENESS OF THE KENYA LEGAL DEPOSIT

To assess the effectiveness of the legal deposit act, it is necessary to analyse some of its clauses. The Book and Newspaper Act indicates that

"this part shall not apply to or in any respect of any book or newspaper printed or published by or on behalf of the Government"[5].

It is further stated in Section 5(2) that the Minister may gazzette the exclusion of any book or newspaper from being deposited. In the subsidiary legislation of the Act, the classes of books and newspapers excluded under Section 5(2) and Section 10(2) for newspapers are indicated.

As the above Sections indicate government publications are not included in the deposit system. This could be due to the fact that the Act was enacted during the colonial era, and the colonial administration machinery being very small meant that everything was under control. Another possibility could be the fact that the colonial administration wanted to have some control of everything published outside the Government printing office. Whatever the reason was, the situation today is quite different. The Kenya Government consists of twenty five ministries, and each ministry has various departments. Apart from the ministries, there are various parastatal bodies. These institutions produce a lot of literature which at present is not under bibliographical control. The depository Act therefore, covers only a certain sector, that is, the commercial sector of publishing in Kenya. The Act does not cover the deposit of audio-visual materials. Audio-visual materials have gained eminence as sources of knowledge and their exclusion in the deposit Act leaves a gap in bibliographical control.

DEPOSITORY PROCESS

The present practice is that books and newspapers are deposited with the Attorney General's Chambers under the responsibility of the Registrar for Books and Newspapers. The Registrar just receives what has been deposited. He has no knowledge of the quantity and quality of what each publisher has produced as there are no current and comprehensive publishers catalogues produced. It is, therefore,

difficult for him to cross-check on what has been deposited and thereafter trace any defaulters. This situation has left the publishers free to deposit copies at their own discretion. The receiving libraries, therefore, find that they receive very few publications of very low price value and the

> "quality and quantity of the deposit collections does not reflect what is actually published within the country"[5)]

The case for newspaper publishers is different from that of book publishers. Newspaper publishers are required by Law to sign a bond with the Registrar and no person is supposed to

> "print any newspaper in Kenya, and no person shall publish any newspaper printed in Kenya, unless there is in force, executed, registered and delivered by him to the Registrar as hereinafter provided, a bond in the prescribed form in the sum of ten thousand shillings, with one or more sureties ..."[7)]

It is further stipulated that those who contravene the regulations of the bond

> "shall be guilty of an offence and liable to a fine not exceeding ten thousand shillings or to imprisonment for a term not exceeding one year, or to both such fine and imprisonment"[8)].

The fact that there is a bond binding the newspaper publishers and the registrar enables him to have a proper record of all these publishers operating within the country. It is, therefore, easy for him to cross-check against those who have deposited the required copies. It is very interesting to note that the penalty imposed on newspaper publishers is for publishing and printing without having executed a bond and not for failure to deposit copies. As a result, newspaper publishers could deposit copies at their own discretion.

RECIPIENT LIBRARIES

It has been ovserved that two copies of each newspaper and its supplement are to be deposited, yet there are three receiving libraries. This implies that one of the libraries must be disadvantaged at any one time. However, some institutions, for example, the Kenya National Archives do receive all the newspaper copies daily and direct from the publishers on complimentary basis.

Recipient libraries have been experiencing a lot of delay before the materials are finally deposited. This could be due to administrative procedures at the Office of the Registrar. This delay means that immediate access by users to deposit materials is not possible. This delay has of late considerably improved.

The above discussion has given some insight into the legal deposit system in Kenya. Guastavino, writing as an expert with the Spanish legal deposit indicates that

> "it is not enough to make deposit compulsory, to specify the types of publications and the number of copies to be handed in, the persons who are to conserve them and the penalties imposed for non-compliance"[9)]

He argues that necessary procedures to be followed should be worked out as well as a system of supervision and inspection of the law. His arguments apply quite well to the Kenyan context in the fact the law is there, though in need of revision to include all records in whatever form, and to include penalty for defaulters. What is lacking are proper regulations for the inspection and supervision of this law.

CONCLUSION

The article has attempted to analyse the legal deposit act in Kenya by looking at its various clauses to ascertain its effectiveness.

It has been observed that the legal deposit law is not effective because, it is not comprehensive in its coverage of what has to be deposited, it has loopholes as there are no penalties to be imposed on publishers for non-compliance. It is, therefore, clear that the law calls for revision since in its present form, it is a major contributor to the problems of bibliographical control in Kenya.

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USER EDUCATION - A CRITIQUE

by E.W. Muya

User education (instruction) aims at giving the users the requisite skills to be able to maximize their exploitation of resources in a library or libraries. It involves the whole concept of information communication "process". The use of the concept of 'process' is deliberate here because it is only through understanding of this process that users can be able to intercept the information as need arises. This process is referred to as the bibliographic chain which otherwise should refer to the channel(s) that documentated information travel to their final resting place(s) in various documentation but I think the main concentration in user Eduaction is in this area.

In most of the libraries and among librarians user education is taken as an article of faith. Indeed, since the inception of the idea that to know how to use a Library is an essential part of the educational process in the mid twenties, this view has not changed at least among librarians. However it is doubtful whether user education is an educational process on its own right or a technique/tool to facilitate the educational process. A closely related question is whether a library is an academic department on its own right or is just a tool to facilitate the educational process.

However since the Royal Society Scientific Information Conference held in London in 1948 most of the libraries have implemented the recommendations of that conference in one way or the other. In general terms then, user education is now well recognized as an important programme at least within Librarianship. But its implementation tends to take root when librarians become more outgoing and service-oriented and more readily accepted in the newer libraries. However, it is doubtful whether it has made significant progress at all. I tend to hold this doubt particulary when I look at the literature on the subject. Though we cannot say that literature

is lacking in general terms we can surely say that the literature available is definitely one-sided. Reading this literature one is bound to conclude that user education is just beginning. Much of the literature is redundant and the rest simply describes various user education programmes on how to organize such programmes. We have very little on what our final goal is. What exactly are we trying to do? May be it is high time that a conceptual framework is developed, a philosophy upon which the practices can be based. Until we move in this direction, we will find ist difficult to claim significant progress, leave alone being able to evaluate programmes effectively.

Again, if you check the content offered in these programmes you get an impression that they are seen to be "watered down" librarianship. Users seem to be taught as if they are interested in learning about librarianship and libraries in general. But to the contrary they are not interested in learning about sources, guides etc. for their own sake. They are simply a means to enable them to find information on their subject of interest. Thus, even where we are teaching about the catalogue we should remember that the techniques of cataloguing is not a serious area of interest but rather the information the catalogues carry to assist the readers should be the area of emphasis. It is therefore extremely important that we understand what we are trying to teach in all its dimensions. If anything, it requires a totally different approach. It is a programme whose content should be interpreted to reflect those aspects of user behaviour that are meant to be modified among many other aspects.

At the same time we should appreciate that a lot of information is not necessarily a good thing. Infact we know that most of the users want less and less information and not all the potentially useful information. In any case they don't have lots of time to see everything. In effect, users must of necessity select what to use and what to leave out. A lot of librarians involved in user education seem to be under the general impression that what is required by the users, is to find as many potentially relevant books and journals as possible. Yet according to some users potentially useful sources are a hindrance rather than help since most of them will eventually

be eliminated anyway. They only want enough information to answer the queries that they may be having. For this reason the principle of selection must be included in all user education programmes.

A lot of courses are very general and not related to the students' academic courses. They are not indeed serving an identified need. We said earlier that user education is taken as an article of faith. Because of this it is believed that user education programmmes are necessary. Librarians just go ahead and draw a programme that they think students would require. Such a believe is hardly based on substantive evidence of needs. We know that most of the students needs are created from their curriculum and of course greatly influenced by the teaching staff. The cooperation of the teaching staff is not always called upon and it is, sometimes not forthcoming. For this reason most of the work including exercises are not closely related to their academic subjects. Another reason why this relationship may not be there is because those teaching it have not requisite academic knowledge to set reasonable exercises. Even where they have such kind of competence without the cooperation of the teaching staff, the exercises may not be closely related to what is being taught in the classroom.

Because of this, doubts have been cast on the competence the librarians have in offering user education. Cubbins (1980) says that it is "difficult to see how librarians have anything of educational value to offer to any type of undergraduate which is not more appropriately taken from some other source. It is even doubtful if the librarian can be of any use to research students".

He argues that the nature of research is of necessity into very fine details, a competence that librarians, who are mainly generalists, do not have. It is believed that a librarian might typically point out his holdings on a given subject. But, if he "believes that by doing so he is helping the serious student, he is displaying a regretable ignorance of professional needs and procedures".

Although the librarian can be able to give orientation for the new students, it is in the detailed reviews of "specific subjects, where one suspect that the amateur is trying to take over the work of a professional academic". He goes on to say that: "The last thing librarians should do is to tell their customers what their business is, especially as the customers are better qualified in their business than librarians."

That apart, there is no doubt that librarians have the bibliographic expertise. But this is seen to be useless when in the main, help to readers can only come from someone with subject knowledge. However librarians can use this bibliographic knowledge in making the library usable. Hence make it easy for a user to find a book in the library as grocery companies make it easy to find items in the shops. All that these arguments are boiling down to saying is that librarians are creating systems that are unusable and instead of making them simple and straight forward they are spending more time in an area where they have no competence. They should therefore realise that the systems so created are unusable, otherwise the people know how to use the libraries.

So the argument goes that it should be noted, that: "libraries are not in general difficult to use and they should not be. Mastering the system is a technique rather than an art. Thus finding a book in the library is not strictly educational".

Hence most of the systems are more library-oriented than user-oriented. Yet they are supposed to meet the needs of users. That is why at times there is a feeling that library and information science training is faulty in the sense that it puts the librarians further away from the users through the systems that they finally create. Because of the library systems being unusable, librarians are often under the impression that much of the library's stock is apparently underused. Yet they do not realise that actually, it is the stock that is unusable and the whole consequent system so created. For this reason stock development must be more sensitized to the needs of users. Consequently, librarians must increasingly take pride in

quality of stock other than quantity if we are at all concerned with how well our stock is utilised.

On the part of teaching User Education, the librarians feel that it is the role of the library to provide instructional courses and view the idea of involving teaching staff cynically. Even if they have to involve teaching staff, it should be recognized as the library's responsibility to give user instruction courses. It is also argued that few academics have extensive awareness of sources of information available. Few also have practical experience in using them or have given enough attention to the problem of teaching others how to locate and use the source. In any case, the literature of a given subject is best understood in the context of a structure of the literature as a whole, a competence the librarian is best qualified to give. In addition many academics though able are not willing to teach bibliographic instruction as part of their own course.

Whatever we say, it is very important that academic staff are convinced of the need for such user instruction courses. For a user education to be successful, cooperation between academic staff and librarians is crucial.

We should also remember that in order for the students to learn they must be effectively motivated. This will not necessarily be so if the librarians involved are not themselves motivated. They must not only be interested in teaching but they must also be able to teach. A poor instructor will definitely affect the course negatively. A lot of us librarians tend to think that since we all have the professional qualifications, we can teach. This should not be so if we are interested in running effective programmes. On the other hand the students must be actively involved to be significantly motivated. The course itself must earn them a credit towards their certification if they will be expected to take it seriously.

In conclusion, I have no doubt that user education is extremely important not only in the educational process but during our working careers. However for it to be effective, it must be well thought out

and planned in a much more wholistic manner than the piece meal programmes that we keep on coming across in the literature. We must therefore develop a framework, if only conceptually upon which user education should be based. At the same time all user education programmes must of necessity be offered as a cooperative programme between the library and the teaching staff. It must therefore be closely linked with the academic work of the participants. Indeed we must remember that if we draw up programmes which are not serving particular needs then of course we will be wasting our time and the students' time too. There is no doubt the students needs are created predominantly by the teaching staff and hence the need for cooperation. At the same time we will be doing a futile job if the students are not well motivated to learn. One way in which we can motivate the students is by making the user education programme earn the students a credit towards their certification. This way the students know right from the beginning what the course is worth and you will not need to dwell on the importance of the programme to raise their level of motivation. We must accept that the language the students understand most is that of passing examination and getting a certificate. To be able to achieve our goals we must therefore seek the cooperation of teaching staff. When the academics have a negative image about librarian's effectiveness in teaching, this will definitely be passed to the students. The Librarian must do everything possible to create a positive image at the institutional level.

The criticism that Librarians create complex systems and give least guidance to the users must be looked at seriously. We must look at ourselves and the systems we create and make it as easy as possible to use. The often heard criticism by the librarians that students and staff are not using the library well may as well be partly explained by (1) the system being complex and (2) the stock being unusable. So, the underutilisation of the library resources may as well be explained from within. This first item may be solved by user education or even orientation but we must also make tools and all relevant library resources available. We must remember of course that we may teach user education to embarass ourselves. We must do our best to put the system right. Most of us in this East, Central and Southern

African region do not have full time staff charged with the responsibility of stock development. It is high time we stop talking about the number of volumes that we have and start taking more serious steps towards quality stock. On the content of user education we must appreciate that its content is not watered down librarianship.

User education is not an end on its own but a means to an end. In addition, we must remember that users do not need all the information in the library. What they need is a small amount of highly relevant information. To be able to get this small amount, they must learn the principles of "selection". Most of the user education programmes do not have this element which is a serious gap considering that users do not have all the time to see everything in the library world. At least they should be able to select the core and the marginal sources easily. Finally Librarians should recognize that those who are involved in teaching User Education are themselves highly motivated to teach and that they can teach effectively.

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THE NEW INFORMATION TECHNOLOGY AND THE BOOK PROFESSIONALS: A WAR OF SURVIVAL

by S. Ouma

ABSTRACT

The viability of the book is an issue that has been raised in many circles since the coming of the so called 'New Information Technology'. The future of the book is perhaps more uncertain in the developing world where nations are yet to venture into the new technology. This paper briefly discusses the future of the book in the light of those directly concerned with the production and marketing of the book; those who help in disseminating information in print. Thus, authors, publishers, booksellers and information workers are discussed as book professionals. The information user is also discussed as the end user of the printed information.

Although this paper lays emphasis on computer-based technology, it is noted that the influence of the man media on the book is equally vital. The paper tries to weigh the pros and cons of a paperless information system. The conclusions drawn by the paper urges developing nations not to shy away from the new information technology. And warns that steps towards adoption must be accompanied by careful measures. The book, the paper suggests, is here to stay.

INTRODUCTION

> We have slipped into a new society without quite noticing it, as a result of the electronic revolution, and we are still bumbling in the old ways while a third revolution, the information revolution is overtaking us.[1)]

These words spoken by one scientist at a conference no doubt apply to the developing world and in particular Africa. Many developing countries have been caught up in the web of technological innovations without realizing it. The only way out of the web is perhaps to accept assimilation or remain cut off from the world of information.

It will be noted that the subject of the new technologies is a highly complex one and cannot be dealt with in depth in a paper like this. The discussion is limited in as far as it may affect Eastern Africa. Much of the discussion is based on assumptions since nobody is sure, of what the future will really be like, particularly for the developing world.

The new information technology has been described as new revolution likened to the European Industrial Revolution. The only difference according to Stonier is that the industrial revolution involved devices which expanded the human musculature, devices which lifted things, transported things, dug up things, crushed things and so on[2)]. The 'new electronic revolution' as he cells it, in contrast involves an extension of human nervous system. T. Stonier refers to the telephone and radio systems as an extension of the ear; film and television systems as an extension of human sight and hearing. The computer he has described as an extension to the human brain.[3)]

The general fear about the effect of the new technology on the existance of the printed media has been world wide. But whereas the developed world has begun to perceive the new technology differently, the developing world still sees more disadvantages in adopting the system. In order to understand the speculation of the effects of the new technology in the book industry, this paper observes each book profession individually and tries to outline the kind of possible threats that each faces. The advantages that each may reap from the new technology are also outlined.

AUTHORS

With regard to the new technology, the following three areas should worry the author:

(i) Whether the kind of material that the author specializes in is susceptible to online input.
(ii) Loss of royalties, copyright protection and the prestige of having one's book published by reputable publishers.
(iii) The cost of owning a computer and being able to keep up with the new technology.

So far it seems likely that some categories of books will disappear all together. The first to go will perhaps be books that present collections of small items of information: mainly the quick reference books like the telephone directory, dictionaries, yearbooks, etc. from these sources a reader seldom takes more than one item of information at a time. When one requires a telephone number to call up one individual, he only looks up one word from a dictionary. At the moment and at a great expense all telephone users have to be provided with thousands of numbers which they will never use. It is this kind of information that would be ideal for online publication. And hence compilers of quick reference material may find themselves redundant as authors.

It is also likely that textbooks will disappear from print. Language laboratories enable a language to be learnt at a speed that suits individuals learner. There seems to be no reason why all textbooks should not follow the same development. Such development poses a threat to textbook writers. It is hoped that the one kind of writer who may never disappear from the scene is the author of novels. Although readership for pleasure may be measured as low in much of the developing world, it must be accepted that those who read for pleasure will stick to the novel in its present form.

Authors in Africa, and I believe in much of the developing world, are often faced with the problem of non-payment of royalties, par-

ticularly for works published by indigenous publishers. Since the trend of developments envisaged suggest that authors who decide to adopt the new information technology may by-pass publishers, this problem may be alleviated. However, since the other side of the coin suggests that loss of royalties however little, is no good news for any author, a new struggle between database owners and authors may erupt, as the two try to strike a bargain on the equivalent of royalties currently paid on printed works.

In the new information age, authors will be expected to enter their manuscripts directly into a computer system (database) from their office or home computer terminal. Users will be expected to access the same works online through their own terminals. Thus, users of information would be anywhere in the world helping themselves to information as and when they need it. With these trends, authors may have to think about new ways of protecting their works from International Piracy. The current copyright laws may not work with database and computer terminals in homes, schools, offices, libraries etc.

Lastly, this paper suggests that most authors, particularly in the developing world, think there is some prestige attached to one's work being published by reputable publishers like Longmans and Mcmillan. With manuscripts expected to be input directly into databases, authors may have to forego both the prestige and the generous royalties they may enjoy from such publishers. Clive Bradley made a similar observation when he said: "As the storage of information become 'invisible' and as access to it becomes more individual, the problems of compensating the author and producer (information provider) for their effort, input and investment becomes more intense ..."[4)]

The third issue which should be the worry of third world authors is availability of capital to keep up with new technology. Authors will need to buy computers and related gadgets that would enable them to link up with colleagues. Furthermore, they must consider training or re-training facilities which would enable them to handle the new

technology, all of which cost money. The cost involved in adopting the new technology is seemingly exorbitant although it is argued that costs go down as technology develops. For a developing country with other priorities pressing hard on the already tight economy it might not be very sensible move even for those authors who may not wish to remain 'old-fashioned'.

In summary what this paper is saying is that the author as a book professional is there to stay. Those who may be affected will have the opportunity of venturing into other areas of writing. Furthermore, the new technology presents the author with opportunity of venturing into the electronic age. And lastly, authors may have more freedom of press as they escape censorship. Since authors will be expected to input their work straight into the computers, works that would have been eliminated by censors, will be published online. Nevertheless, the possibilities of censors getting online should not be ruled out.

PUBLISHERS

Publishers in Eastern Africa like their counterparts in most developing countries have been exposed to some aspects of the new technology. A number of publishers probably use computers for in-house jobs like billing. They are, of course, very familiar with the telephone system and have perhaps been exposed to the idea of teleordering if their parent firms are in the United Kingdom. For this group of publishers the advantages and disadvantages of the new technology may have been revealed. For others particularly the indigenous publishers, who may not have engaged in any kind of computerized system, the idea is still remote. Nevertheless, the technology is here, adopted or not it will affect the publishing trade.

John Cox[5] divides the new information technology into two main types: computer-based and television-based. He also goes on to categorize publishing into two: narrative and access publishing.

According to him television-based systems like videotex are dependent on print media so he rules that out as being a possible threat to conventional publishing. It is therefore the computer-based system that may threaten conventional publishing. John Cox believes that of his two types of publishers one will be affected and not other. The narrative publishers are those who publish novels, poetry, biography; the type of material that people read for pleasure. The narrative publisher may therefore survive. The access publisher, on the other hand could be threatened. These are publishers of encyclopaedias, reports, journals and archival material. Because such material are suitable for machine-readable format their publishers may be displaced. Textbooks though a form of narrative can also be grouped into access publications. Publishers specializing in this field may also be eliminated.

Publishers in the developed world have perhaps learnt to co-exist with the new information technology hoping of course that the print-media will last as long as possible. Furthermore, because of the high technologies they are exposed to they have the option of electronic publishing. They could also engage in online publishing by creating their own databases and charging fees for access. When this happens as it is most likely to do, the developing world will be cut off from the information world. Unless the developing world can pay the access fees and more important, own the machines and the systems through which access can take place no information will filter out to the developing world.

The only suggestion that could be adopted by the developing world is to tackle each pressing issue as it comes. What must be avoided is to shy away from the new technology. Engagement into electronic information handling may not be avoided altogether but perhaps what each country has to weigh very carefully is what should go into a data base. Experiences in the developed world have shown that some material of historic interest has been discarded only to be realized much later that such materials should have been preserved.[6] The whole exercise would need a clearly defined information policy at the National level.

BOOKSELLERS

The fate of the bookseller in the era of the new information technology is perhaps more doubtful than that of the author or the publisher. Michel Gaul made a similar observation when he said: "The bookshop is unquestionably the most threatened of the traditional structure in the long term unless it changes radically, and the bookseller becomes an information seller ..."[7]

Like their counterparts in the book trade booksellers in the developing world are not completely ignorant about the new information technology. A few booksellers who order their books from publishers and book suppliers overseas have been subjected to quoting the International Standard Book Numbers (ISBN) and the International Standard Serial Numbers (ISSN). There are machine readable codes which make it easier for the book-suppliers to key in the same information to their publishers.

In Britain, a system known as Teleordering has been developed in which the bookseller inputs his orders on his terminal during the day, the same information is then transferred overnight by a telephone link to the publishers' terminal. This development has speeded the process of ordering and making available needed material to users. It has also saved book-suppliers the cumbersome job of dealing with lots of paper documents, a situation that is still taxing in much of the developing world. Teleordering is ideal where a computerized ordering system has been developed. Since such a system is not in practice in much of developing world, local booksellers in these regions will have to continue with the manual system for some time.

The new information technology has one advantage of introducing a more accessible advertising medium for booksellers. The television system and the radio have been used as effective advertising media for some time now and as more versions of the system like videotex are introduced, the bookseller should be able to make use of them. In the developed world the new media have also served as quick

communication means for the bookseller. With the new technology the bookseller can know the state of his orders at a touch of button and be able to inform his customers accordingly. Perhaps, this is one aspect of the new media that would be most ideal in this region where librarians complain of not being informed of the state of their orders in good time.

Booksellers in the developing world like their counterparts in publishing may face similar problems when trying to incorporate the new technology into their operations. First of all, there is lack of national networks that could be modified to link with the international systems of the developed world. Secondly, the introduction of online ordering will require large numbers of publishers and booksellers to subscribe to the system from the beginning or otherwise the system will fail from lack of support. Since these favourable conditions lack, booksellers may not find it practicable to apply the new technology into their operations. Nevertheless, it is hoped that as long as the book endures there will be need for distribution. Similarly, with the current trends of development in the publishing industry booksellers may have to market information in cassettes, videodiscs and the like.

INFORMATION TECHNOLOGY AND LIBRARIES

Libraries and information services is perhaps the one area that will benefit most from the new information technology. The general view is that the new technology will make library and information services much easier, and faster to render. This will in turn mean, immediate satisfaction to the needs of the user. Librarians may see themselves emerge into 'reformed' professionals, becoming less 'custodians' of books and more experts in the use of online services. It is also possible that librarians along with publishers and booksellers will disappear and users will all be equipped with terminals to access information whenever they need it for individual purposes.

The general fear of being displaced by machines is perhaps more wide spread in developing countries than it has been in the devel-

oped world. Perhaps the whole syndrome revolves around fear of the unknown. A simple mention of installing a library security system will make most library security officers think of the end of their employment. This fear of being displaced by machines may result into resistance to change and hesitation in adopting the new technology. While others may look at the whole issue differently, this paper sees the adoption of the new technology as an added advantage to the accomplishment of tasks currently performed manually. It is like applying a lever to lifting a heavy load.

Leamy's in his observation asserts that information services will continue to be essential and may have a more important role as the means through which access is gained to electronic publications and through which publishers will market their produce.[8] In preparation for the new technology, librarians will be required to instal new equipment for use to access online information. Equipment will also be required to use microform, videodiscs and cassettes. Secondly, staff will require re-training in the use of the new equipment so that they can in turn show their users how to operate them. Thirdly, the user will also have to be trained in the use of the new services. The whole exercise will obviously need large capital input, an expense that can be exorbitant for a developing country. Nevertheless, these should not be excuses to ignore the new information technology.

With the new information technology, libraries and other information services providing access to information online will either expect the user to pay the full cost of services provided or the libraries will bear the costs out of their budgets. So far, what has happened in the developed world is that charges have been calculated on the length of time the service is used and users have always paid for services rendered to them. Experience in Kenya has shown that charging users for an overdue book has resulted in the user never coming back to the library. One, therefore, wonders what will happen if and when the electronic system is adopted and the user is required to pay for the whole service rendered.

A few more issues like legal deposit, exchange and interlibrary lending should also worry the librarian. Currently, a few libraries benefit from the legal deposit laws. This ensures that at least one copy of each published materials is deposited in designated libraries. As long as publications remain in print, this law may continue to be effective, but the question that remains unanswered is what will happen when information is in different formats. Will publishers still be required to deposit a full text of a book or an article, microfilm, videodiscs or cassette to the designated libraries? What will happen to information that will be stored in databases? The new information technology still poses a lot of questions that cannot be answered until perhaps one ventures into the system.

A few libraries continue to supplement their stock acquisitions through exchange and inter-library lending programmes. With the new information technology in operation such programmes may cease to be beneficial. A few libraries in Nairobi (Kenya) today hold some material in microfilm and cassette format which they cannot lend out for fear of loss or damage. This means that the new information technology might do away with exchanges and inter-lending programmes.

THE USER OF INFORMATION CENTRES

One point already observed by Leamy is that the fact that users of information services will continue to need access to both conventional and non-conventional publication. Libraries will therefore seek to continue satisfying both needs.[9] In this region of Africa this practice may continue for a much longer period. It is very likely that most users will take a long time to give up their traditional strategies of looking for information.

The electronic information service is expected to be faster and much more convenient when the user interrogates the system himself. Some users will require intermediaries to have their querries answered. It is expected, however, that even in most developed countries, most

users will not be able to have their own terminals because of the high cost of purchasing them. For this reason the majority of information seekers will have to depend on services in libraries and other information centres.

The major advantage that users will reap from the new information technology is the ability to access only that information they want. However, because the technology is expected to be costly to install and maintain, and because of the cost of access to the information, users will be required to meet part of the cost if not all. Whether the system will be cheaper for the user than the present print-base system remains to be seen.

Users of the new information system may also have to cope with different languages of the numerous databases that will be in existence. This may require the re-training of users so that they are able to access the information. Who pays for this re-training would be one other issue to think about. This re-training might be much more expensive and more demanding in a region where users are categorized as illiterate or semi-literate as is the case in much of the developing world.

While users of information in this region of Africa may be excited about the new information technology, they have yet to experience some of the health hazards that it may pose. Eye-strain in the use of the non-print media has been noted in the developed world. Those who view many hours of television will also agree that it can be a strain on the sight. If all information has to be accessed through the Visual Display Units (VDU), the situation will be much worse.

Finally, the information user in the era of the new technology will loose the liberty to carry his reading material wherever he goes, the liberty which he can now exercise with the book. Computer-based and television-based information is not easily portable. Where this may be possible as in the case of cassettes and discs, one would still be required to carry around the gadgets through which they must be used. Besides, the medium may be easy to carry about, but this

may increase their chances of being damaged as most of them require more protective care.

SUMMARY

The new Information Technology has been discussed here with the development in Eastern Africa in mind. Although references have been made to the whole of the developing world, it is hoped that much of developing world is affected in the line of discussion. It must however, be remembered that parts of the developing world, are much more advanced than others.

The paper reveals that the pros and cons of the new information technology are still debatable. It is also apparent that whereas the advent of the information technology may look remote in this region of Africa, the technology is actually already adopted in a small scale. The Radio, television and telephone systems are already operational. Individuals own television sets through which they have been able to use video cassettes. The film industry is also in existence. Libraries and other information centres hold some of their stock in microform and tapes. Computers are operational in various institutions. Furthermore various international bodies with their offices in this region have been able to use international information networks online.

Making a step backwards form these developments would not be the best advice and making extensive leaps into the future would also not be recommended. Perhaps what ought to be done without pumping in too much of the limited resources is to make sure that the existing systems are maintained so that they serve efficiently and effectively in the areas they are supposed to serve. Thereafter accept and adopt the other aspects of the technology.

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THE PROBLEMS AND CONSERVATION OF LIBRARY MATERIALS

by E.M. Muya

The preservation of human records has been there since the creation of records themselves. What may have differed in time is the approach that has been used. It should be noticed that paper was being treated with insecticidal materials in China during the 5th century. Although this practice is that old most of us do not take this responsibility with the seriousness it deserves. This may partly have something to do with our training such that conservation of resources was never seriously emphasized.

Yet even though this is the situation the problems that require attention from the preservation viewpoint are still with us. In fact they are inherent to our jobs because of the nature of the materials that we handle. Majority of our resources are paper based and others film based. There are certain problems that go with paper or film based materials. Paper, at least the machine made paper loses flexibility gradually and finally becomes brittle and crumbles. I say the machine based because the handmade paper of middle ages is still in good condition. We have all heard at one time or the other the general comment that "when all manufactured goods were made by hand the quality of goods was very high." The paper quality went down with the discovery of chlorine by Scheele in 1774 and bleaching became possible.

The situation of deterioration of paper is so serious that it should never be taken for granted by those managing libraries. In the Library of Congress (though the environmental conditions may vary from place to place) Frazer Poole reported that a sampling done in 1972 indicated that perhaps about 6 million volumes out of 17 million were in the advanced stages of deterioration and in thousands of instances the paper had become so brittle that to turn a page is to break it off. (Williams, 1981 p.)

The problem with the paper as we all know is the process in which it is made. In wood from where the paper is made the fibres are bound together by lignin. Lignin in the paper making process, is chemically dissolved and is washed away from the cellulose fibre and then the fibres are bleached. In this process the cellulose fibre is degraded which in turn makes the life of paper very short. With the addition of rosin-alum solution to make the paper sized, it leaves the paper being acidic which finally makes it brittle within 25-50 years. It is this addition of alum that makes the paper deteriorate very fast.

On the other hand it is established that a good quality alkaline paper can last a thousand years. The widely held view that rags were better than paper may in this case be deceptive. In Europe the use and the talk of neutralsized calcium carbonate loaded papers is well established. The Barrow Research Laboratories established specifications for permanent and durable bookpapers. The permanence here refers to a high degree of chemical stability as proved by slow deterioration. We may have seen in some Library of Congress Catalogue properties of its paper stated on the front page. The paper with a pH value of 5 to 5.7 is quite stable since it is well above the danger zone of pH 4.5.

Other than the problem of the chemistry of paper itself we also have the problem of the binding used these days. Approximately 70 per cent of all books published are marketed in paperback bindings. Paperbacks are useually produced on high speed web presses in two-up impositions. This means that the direction of paper grain is in most cases transverse to the binding edge. The result is poor "openability" and waves on the fore-edges. This type of work is not meant to last beyond a few readers which is in direct conflict with what the library would want to do. At the same time the hardcover binding which we are receiving in the libraries has also changed from sewn volumes to that of adhesive binding. It is estimated that approximately 80-85 per cent of all hardcover books are now adhesive bound either in single sheets or by utilizing other techniques. The paper that is used is the least expensive.

Very often when we are buying library books we do not give serious regard to the standard of binding. We know that publishers produce books to sell them and not to increase circulation. Most edition work is geared towards individual readers. Consequently, the almost physical collapse of bindings leave the librarian with lots of problems. This is because they know that books destined for circulation must last long enough to provide low cost readership among the number of readers. Binding for this kind of purpose can therefore never be satisfactorily done on mass-production basis. This is because it is good economics from the librarian point of view for a book to circulate as many times as possible so that it can provide lowest cost per reader.

In general then there should be some kind of library binding as a cost saving device. Experience has shown that books rebound according to the library binding standard will provide a hundred or more circulations thereby reducing the cost per circulation. Oversewing should still be considered as a basic method of affixing pages to build strength in the library binding. Reinforced-paper and synthetic cover materials can also be used whenever possible.

Other problems that face the book as an entity include fungi and mold, temperature and humidity, rodents, bookworms, cockroaches, termites, silverfish, and lighting. People can also be considered as harzadous to books too.

I have said earlier on, that paper is organic and made of cullulose. Fungi subsists on organic matters like paper. However they thrive well in a moist and warm atmosphere where ventilation may be poor. When it so grows, it has a devastating effect because it decomposes the cellulose. Mold appears mainly on book covers. Fungi stains paper with yellow or black and brown spots whereas mold makes the paper whitish in colour.

The fungi and mold problem is very common in this region. Some of the following possible steps may be used as preventive as well as treatment measures:

(1) Libraries should facilitate open air ventilation or where possible air-conditioning could be applied. Though this may be expensive, limited air conditioning could be considered.
(2) Packing of books too tightly on the shelves should be avoided.
(3) Temperatures should be kept below 24°C and the relative humidity below 60 per cent.
(4) For the active mold spores a clean wet cloth may be used as long as such treated books will be let to dry in the fresh air for at least two days.
(5) For the foxed books you need a conservator who may possibly be able to bleach it.

Temperature and humidity need to be controlled. This is so because as a general rule paper would give up moisture when the relative humidity decreases and retains more if this situation reverses. Therefore paper based materials have the capacity or properties to allow it to absorb and retain moisture. If the temperatures are high with low relative humidity the paper may dry up fast making it brittle and the adhesives loose. On the other hand high temperatures coupled with high relative humidity will encourage growth of fungi. In order to control this problem the relative humidity may be kept fairly constant (not above 60 per cent) and the temperatures at about 24°C. Good ventilation is important. Air conditioning may be used where necessary.

Rodents are dangerous to books because they tent to eat paper quite fast even when they are not many. They use holes, windows or even water pipes to get into libraries. Their dwellings are usually in dark corners or where the books are tightly packed. Old newspapers which may be kept unbound, remotely kept and hardly used books are the areas you can expect to find them. To be able to eliminate them the library should be kept very clean including the less used areas and resources. Constant check in these areas may save a lot of books from being eaten. Food should not be brought to the library and if it is thorough cleaning must be ensured. There are also various chemicals which should be used to kill the rodents.

Bookworms are quite common in our libraries. Beetles tend to lay their eggs in hidden corners and expecially on the edges of books. These eggs hatch into larva and this is what we call bookworms. You will notice little holes on the book pages which are made by them and such books should be removed for treatment. Such books may be placed in polyethylene bags and used in a blast-freezer chamber about -20°F. Otherwise, you can spray them with pesticides.

Coakroaches are a nuisance everywhere including the houses we live in. You keep on seeing them once in a while climbing over the wall. They like libraries because there are too many places to hide in. They live in dark corners and reproduce constantly in great numbers. The glued part of books is their main area of attack. It is difficult to know when they are there because they hide during the day and only come out when it is dark. Once you notice them you can call the professional exterminators who will use various chemicals to eliminate them. Proper house keeping is also necessary. These are usually difficult to eliminate without using chemicals.

The termites are also another enemy of books. They live in highly organised colonies underground. When they get a book, they feed on cellulose mainly. The only way to eliminate them is diggin around the foundation and the soil around could be treated.

Books should also not be exposed to ultra-violet light especially the newspapers which tend to discolour very fast. The use of artificial light can be useful in this case.

Finally I would like to say that users are also enemies of books. A lot of them handle the library materials carelessly, and they are the most difficult to take care of. They eat and drink while reading. The food drops and the drinks pour onto the books. They smoke while reading and not take enough care to ensure that the ashes do not fall on the books. Users write with ink, pencil etc. on rare books, manuscripts and all other library materials. They make their comments on the books thus adding other views on the text, expressing satisfaction or dissatisfaction with a part of the text. These

are very injurious to the books. Books have been returned to the libraries with holes made by cigarettes. They pull out pages, cut out pictures or photographs etc. It is therefore necessary to check books on their return not as a way of getting the culprits but may be as a deterrent measure. Rare books and other precious materials must be closely supervised. Above all we must cultivate positive attitudes on the part of users especially during our orientation and user education programmes.

As a conservation measure the use of microforms must be enhanced. Microform is a term used for any form of either film or paper which contains microimages. They may be roll film, microfiche etc. The roll film is a length of processed film on a reel. Its common size is 16 mm or 35 mm wide. These days it is possible to get lengths of up to 140 feet. The microfiche is a sheet of microfilm containing multiple images in a grid pattern. The standard size is "A6", 105 x 148 mm (4" by 6") providing 98 frames. Most of them are 24 times reducation. The use of microforms especially of our rare documents in the libraries has been going on for well over 40 years now. It is also useful for conversion of newspaper files as a means of saving storage space and preservation. By using microforms, we will definitely increase durability for they can withstand a more rugged handling than some of our paper materials.

In conclusion, I would say that the library stock has got a lot of enemies. Some are inherent to the nature and making of the paper itself and others are external to the paper. Most of us librarians need to consider the enemies of paper very seriously. It is high time that the librarians are sensitive enough to the problem. Although conservation is a profession on its own right, librarians must be able to administrate conservation practices. Of course you will notice that conservation and library work is closely related. Thus Darling (1981) says:

> "Building plans, collection and access policies, processing procedures and handling methods used by both staff and the shipping room through its last trip to the discard pile, all have

a direct bearing on the survival of the collections. Put it in another way, the responsibility for the physical care of the library collection is ... diffused throughout the library, at every level of the staff. The correction of practices which endanger, and the coordination of those which preserve, is an administrative challenge of no small dimensions".

I am suggesting here that library education should be drawn with the above responsibility in mind. I have no doubt that the beginning of serious conservation practices in the Eastern Africa region must start by exposing our librarians during their training to at least the rudiments of conservation. This should be so especially to the preservation part of conservation. By preservation here, I mean exposing them to the preventive methods like environmental control, storage and housing to benefit the entire collection. Such methods may require an understanding of an engineering approach in designing and operating environmental control systems or designing of new library buildings or even renovating others. Though I would not expect the librarian to understand the technical part of, say the air-conditioning system, he should however be able to tell the engineers what he wants from the system.

At the same time it is necessary for the library schools in conjunction with other departments to prepare programmes which can produce specialists in this area of conservation. Till we get manpower in this area conservation problems may grow at such a rate that it will be difficult to contain them. Such a programme should produce specialists who will have knowledge in both administration of preservation programmes plus the technical aspects of conservation.

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LIBRARY/INFORMATION MANPOWER SURVEY IN THE SUDAN

by C. Wesley

BACKGROUND

The Democratic Republic of the Sudan is the largest country in Africa and the eight largest in land area in the world, with a population of twenty two millions. Only about 15 percent of the population are truly urban and about eighty percent of the people are estimated to be illiterate.

LIBRARY EDUCATION AND TRAINING

Modern library/information activities are a recent phenomenon in the Sudan. The first organized course in librarianship in the Sudan was a six week course given in 1960 by a UNESCO expert who also conducted a ten days seminar for senior librarians. At present, the University of Khartoum Extra - mural Studies Institute offers two types of education for librarianship. An elementary level course which was started in the academic year 1962/63, which may be followed up by the certificate course which was started in 1969/70. Both courses are undergraduate courses conducted on three days a week, each for an academic year. In 1983 the Institute introduced a three years undergraduate diploma course. Besides, the University of Khartoum is studying the possibility of starting a postgraduate diploma course in librarianship.

An undergraduate, four year program, was started in 1967 at Omdurman Islamic University leading to a B.A. in librarianship and

archives. On third of the courses offered are devoted to Arabic and Islamic studies.

Since 1981 Juba University offered, with the assistance of the British Council, a one-year certificate course in librarianship for high school graduates. This course which is part of the program of the College of Adult Education and Training is administered by the University library. Lately this course has been discontinued due to security reasons.

No short or refresher courses are offered by any organization in the Sudan, and for these we depend on opportunities offered regularly by DSE and occasionally by UNESCO, ALECSO, ALDOC and others.

THE VALUE OF TRAINING

Training is one of the important forms of developing the manpower resource. Such a resource is one of the most important components of a nation's library and information infrastructure. Personnel needs training in their present jobs, in preparation for future assignments and promotions and to meet the requirements of change both technological and within an organization.

Training enables staff members to develop their capabilities to the fullest extent in the shortest time possible, which ultimately leads to increasing the effectiveness and efficiency of the organization. Needless to say that the value of training depends on the quality of training. In this regard, Lester pointed out that "through intelligent training ... manpower planning can enhance job satifaction, and raise the quality of utilization of labour resources" (1). Menou expressed the same concept in different words: "it is on the quality of training that the efficiency of a units services and the personal satisfaction of its members depends." (2).

The German Foundation for International Development (DSE) has, for many years, conducted regular training courses for workers in libraries and information centers in the region of eastern and southern Africa. Being concerned about offering training courses which would be the most relevant to the actual needs of the region, DSE proposed and the Information Experts Meeting agreed to conduct a manpower survey, each in his own country, the results of which would be analysed and compiled by DSE Information and Documentation Training Section. (This plan was abandoned due to the fact that by April 1986 only 2 out of 11 countries had provided the respective analysis; the Editor).

MANPOWER SURVEY IN THE SUDAN

The manpower survey questionnaire was sent in the first week of May to one hundred and twenty addresses including Universities, institutes, research centers, ministries and government departments with a potential of maintaining libraries. Only a few questionnaires were returned, which required that a staff member of the National Documentation Center visit, sometimes several times, those who have not responded. The collection of information was extended up to end of September. Fifty two questionnaires were completed and returned, of which three were excluded because of missing information. Not all departments addressed had libraries.

Information for questions one and two with regard to:

a. the southern region - was extracted from "Directory of Libraries in the Southern Region" (3).
b. school libraries - was given to the writer from head of the School library Development Section of the Ministry of Education.
c. public libraries - was given by head of the libraries Section of the Culture and Information Department.

The survey is intended to survey government related libraries. For this reason libraries of the Arab organizations and foreign missions are excluded.

The information collected and analyzed is presented in the order of the questions of the questionnaire as follows:

1. Please tick in the box which most closely describes your service:

The libraries/documentation centers surveyed fall into the following categories:

- university and faculty libraries	10
- college libraries	4
- documentation/information centers	6
- government libraries	19
- government libraries in the southern region	21
- research libraries	10
- public libraries*	10
- school libraries**	22
Total	102

* Nine libraries are administratively under the Culture and Information Department of the Ministry of Information and National guidence. One of them is administratively under the Ministry of Education.

** The majority of high schools and primary schools have only collections of books in the classrooms, but no school libraries with fulltime staff.

2. Please give the total number of staff presently employed in your organization:

	Doc/Inf. Centers	University	Colleges	Government	Southern region*	Schools	public	Total	%
Professionals:									
ALA	-	2	1	1	-	-		4	
FLA	-	-	-	-	-	-	-	-	
B.A. Lib. Stud.	1	19	-	12	-	-	-	32	
B.Sc. Inform.	-	-	-	-	-	-	-	-	
Post grad. dip.	1	9	-	-	-	-	-	10	
M. Sc. (inf)	-	5	-	-	-	-	-	5	
M.L.S.	1	2	-	1	-	-	-	4	
M. Phil.	-	-	-	-	-	-	-	-	
Ph. D.	1	1	-	-	-			2	
Total	4	38	1	14	-	-	-	57	13.8
Para-professionals:									
diploma	2	1	-	1	-	-	-	4	
certificate	1	12	1	20	2	12	-	48	
Total	3	13	1	19	2	12	-	52	12.5
Clerical	10	42	-	44	8	-	25	129	31.1
Non-lib.B.A./ B.Sc.	16	13	2	37	2	-	3	73	17.5
On the job training	6	8	2	8	32	10	-	66	15.9
Others**	3	28	-	2	5	-	-	38	9.2
							Total	415	100

* not including University of Juba library to which a questionnaire was sent, completed and returned.

** administrative assistant, microfilm technician, A.V. operator, binders, typists, attendants.

3. Do you have a training program for your staff?

- Have a training programm	15	30 %
- Do not have a training program	35	70 %

Comment: Training programs may be prepared and submitted, but training opportunities depend in most cases, on the national training program as approved by the Council of Ministers.

4. State the number of persons who are currently on training and/or need to be send for training:

Professionals:	on training	need for training
B.A./B.Sc. (Lib.Stud.)	2	6
Post graduate diploma	2	2
M. Sc. (inf. science)	-	2
M.L.S.	1	3
Ph.D.	-	-
Total	5	13
Paraprofessionals:		
Diploma	1	8
Certificate	1	22
Total	2	30
Clerical:	-	2
Non-library B.A./B.Sc.	1	17
On the job-training	1	10
Others	-	1*
Overall Total	9	73

* binding

Comment: Not many responded to this question, which may be due to the fact that the question 3 specifies that "if the answer to the question is "no": got to question 5". Either this phrase should have been omitted, or the Column "need for training" in question 4. So, it is obvious that the figures are misleading.

5. Please give the number of staff who have left the service in last twelve months:

Professionals	24	40 %
Paraprofessionals	8	13,33 %
Clerical	14	23,33 %
Non-lib. B.A./B.Sc.	7	11,67 %
Others (lib. attendants, binders)	7	11,67 %
Total	60	100 %

Comment: the response shows a high percentage of loss of professionals.

6. Indicate for which of the following reasons your staff left your service:

	death	resign-ation	diss-missal	training	changed jobs	Total
Professional	-	8	-	-	16	24
Paraprofessional	-	3	-	-	5	8
Clerical	1	8	1	-	5	14
Others	-	2	-	-	5	7

Comment: Changing jobs may have been preceeded by resignation or by just quitting and leaving to the Gulf countries as so often happens in Sudan. So the column "resignation" is not very much signi-

ficant. It would have been useful if the column "changed jobs" was elaborated as follows:

- changed to another library job in Sudan.
- changed to another library job outside Sudan.
- left library and information work.

Nevertheless, from comments on question 11, and from observation it is almost certain that those who changed jobs went to the Arab oil-producing countries where salaries are very high.

7. Please give the number of staff who have joined the service in the last 12 months:

Professionals	10	22.2 %
Paraprofessionals	5	11.1 %
Clerical	13	28.9 %
Non-lib. B.A./B.Sc.	12	26.7 %
Others	5	11.1 %
Total	45	100 %

Comment: Those who are joining the service are less than those leaving the service except in the category of "Non-lib. B.A./B.Sc." which indicates more need for training to make this category useful in libraries.

8. Please give the number of posts in your service which are presently vacant and/or frozen:

	vacant	%	frozen	%
Professional	19	38	13	50
Paraprofessional	11	22	6	23
Clerical	17	34	5	19.3
Others	3	6	2	7.7
Total	50	100	26	100

Comment: Response shows a high percentage of both vacant and frozen professional posts.

9. Please give the number of staff needed in the next five years:

	Next year	Next 2nd year	Next 3rd year	Next 4th year	Next 5th year
Professionals	31	25	24	28	16
Paraprofessionals	37	25	30	19	15
Clerical	29	26	23	22	15
Others	4	1	2	-	7

10(a) What type of continuing education do you like to have offered?

	Workshop	Seminar	Vacation Course	Short Course	Others
Professional	17	11	8	15	- Full diploma course - Working visits
Paraprofessional	11	7	10	23	- M Sc - Post graduate diploma
Clerical	5	3	5	16	- Long-term course - Long courses
Total:	32	20	23	53	

Comment: this information requested for the type of continuing education is also repeated in the following question. For this reason, it could be easily omitted from the questionnaire.

10(b) Please specify under each type of continuing education the subject to be presented:

		Workshop	Seminar	Vacation Course	Short Course	Total	Others
Prof.:	A	10	5	3	7	25	- Long term
	B	6	1	4	9	20	Course
	C	1	1	-	2	4	- Long term
	D	2	1	3	3	9	course in
	E	6	3	3	8	20	documentation
	F	2	2	3	1	8	- M Sc
	G	4	2			6	
Total		31	15	16	29		
Paraprof.:	A	6	4	3	8	21	Continued
	B	1	-	4	4	9	education
	C	2	1	1	2	6	
	D	2	1	3	7	13	
	E	3	2	4	5	14	
	F	2	2		5	9	
	G	2	1	-	3	6	
Total		18	11	15	35		
Clerical:	A	-	2	-	-	2	Typing
	B	-	-	-	-	-	secretarial
	C	3	-	-	-	3	work,
	D	2	-	2	7	11	continued
	E	3	1	3	4	11	education
	F	-	2	1	2	5	
	G	-	-	1	-	1	
Total		8	5	7	13		

Summaries of response for subjects to be presented:

Subject	Workshop	Seminar	Vacation Course	Short Course	Total
A. Management	16	11	8	15	50
B. Computer studies	7	1	8	13	29
C. Public relations	6	2	1	4	13
D. Records management	6	2	8	17	33
E. Documentation	11	5	10	18	44
F. User studies	4	6	4	8	22
G. User education	6	3	1	3	13
Total	56	30	40	78	

Comment: management followed by documentation get the highest percentage of response. It would have been useful if terms used in the questionnaire were defined to ensure that they convey the same meaning to those who respond to them.

11. Explain briefly some of your staffing problems:

Response received falls under the following three headings:

(1) Professionals:

a. Immigration of professionals and trained staff to the gulf countries as soon as they obtain qualifications, training or experience.
b. Shortage of trained, experienced staff and of qualified librarians.
c. There is no recognized structure of professional and sub-professional posts, which results in professionals engaging in para-professional work, and para-professionals assuming professional duties.

(2) Courses and training:

a. Lack of courses at the graduate level.
b. Lack of training opportunities.

c. Professional courses tend to teach theory only and graduates are unable to do practical library jobs.
d. On-the job training is difficult to organize because of the small number of professional staff who are too busy to do much training.
e. There are no positions for training officers in all the libraries and documentation centers in Sudan.

(3) Recruitment:
a. Low level of applicants.
b. Administration slow in allowing replacements.
c. Often vacant jobs are frozen for cuts in budgets (amounted to 14 % of the government budget for personnel for 1984/85).
d. There is no allowance for creation of new posts to meet expansion of services.

CONCLUSION

The manpower survey reveals the great need for short-term training as well as education on the graduate level, both of which are not offered in the Sudan. The high percentage of wastage of professionals and trained staff, as well as the high percentage of employment of non-library B.A./B.Sc., create more need for training and education in library, documentation and information.

For these reasons, and in view of the key role played by skilled personnel in the development of library and information services in support of national development, manpower training should be given priority consideration. Assistance from the German Foundation for International Development in this regard is very much appreciated, especially when it is based on the actual needs of the region.

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TYPES OF EDUCATIONAL PROGRAMMES IN ZAMBIA: ROLE AND RELEVANCE

by O.N. Mohamedali

ABSTRACT

This paper states the different levels at which library education is provided in Zambia and describes briefly the role of library personnel produced at each level. It discusses the problems of coherence, recognition, remuneration and relevance of library education in Zambia and suggests possible solutions to these problems.

EDUCATION FOR LIBRARIANSHIP IN ZAMBIA

At the time of independence in Zambia in 1964, there was not a single trained indigenous librarian at Certificate, Diploma, Graduate or Postgraduate level.[1] Education for librarianship began in Zambia in 1967, two years after the inauguration of the University of Zambia in 1965.[2] Since then until the end of 1985, the Department of Library Studies at the University of Zambia has produced 61 Zambians with a Diploma in Librarianship and 117 Zambians with a Bachelor's degree of Arts with Library Studies.[3] Library education in Zambia has now been established on a firm foundation and the conditions are favourable for its development.

(1) Library Education at the University of Zambia

The Department of Library Studies at the University of Zambia (UNZA) provides education at the level of Diploma in Librarianship (Dip. Lib.) and at the level of degree of Bachelor of Arts with Library Studies (B.A.L.S.). It has plans to mount a Master's degree programme in the near future.

The Department's two-year non-graduate Diploma in Librarianship programme prepares library personnel for semi-professional middle-management work in libraries whereas its four year B.A.L.S. programme provides academic and professional education to produce professional staff capable of undertaking responsibilities at high management level in libraries.[4)]

The Department also offers a course in School Librarianship to interested B.A. with Education or B.Sc. with Education students at the Unversity of Zambia. The School Librarianship Course aims to provide would-be teachers with basic knowledge of technical and readers services to enable them to efficiently organise and run school libraries. It is hoped that those who benefit from this course would improve the standard of school libraries in the country.[5)]

In 1985 the UNZA Senate Graduate Studies Committee approved in principle the Department's proposal to introduce a two-year Master's degree programme in Library Science.[6)] We hope to mount this programme as soon as our staff who are now on study leave abroad return home after successful completion of their advanced studies in librarianship. The Master of Library Science (MLS) programme will consist of two parts: course work in the first year, and a thesis in the second year. The aim of the MLS programme is to provide advanced professional education through the provision of advanced and specialised courses in order to improve the quality of professional performance of librarians engaged in information service. It is hoped that the MLS programme would produce senior professional staff well prepared to take up responsibilities at leadership level and ready to contribute through research to an improvement in the standard of libraries and information services in the country.[7)]

(2) Library Education at the Posts and Telecommunications Corporation, Staff Training College, Ndola

The Zambia Post and Telecommunications Corporation (PTC), Staff Training College in Ndola, Zambia, conducts a six month Certificate

Course in Library Studies. This is a non-professional course designed to produce library personnel capable of administering and performing efficiently routine tasks in libraries.

(3) Coherence in Library Education at the University of Zambia

The undergraduate programmes of library education at UNZA are so structured that they offer opportunity for capable students to upgrade their qualifications from Dip. Lib. to B.A.L.S. and from B.A.L.S. to MLS. Students who have successfully completed their two-year Diploma in Librarianship with an average of Grade B are eligible to apply for admission to the B.A.L.S. programme. There is also provision for those candidates admitted to B.A.L.S. with outstanding Dip. Lib. grades to apply for exemptions with credit in four full courses. This implies that candidates who have been awarded four exemptions can finish their B.A.L.S. in less time than ordinary B.A. students i.e. 3 years instead of 4.[8)]

As regards MLS, there is provision in its admission requirements to accommodate those with a B.A.L.S. degree. In fact one of the admission requirements of MLS is a good Bachelor's degree from the University of Zambia plus one year of practical experience of work in any tpye of library.[9)]

(4) Cohesion Between Library Education at UNZA and PTC

Not much has been done to relate the Certificate programme of the PTC with the library education programmes at UNZA. In its initial stages when the Certificate course was being planned at PTC in 1984, there was an active participation by the Zambia Library Association (ZLA) and the UNZA Department of Library Studies in the preparation of the Certificate course content and in the grading of its Certificate in Library Studies.[10)] But since then there has been no monitoring of the course or the quality of its output by the ZLA or the UNZA Department of Library Studies.

When the Certificate programme was being discussed in 1984, it was anticipated that some confusion in the roles of qualified and non-qualified library personnel might arise probably out of multiplicity of library qualifications in the country.[11] In order to prevent such a situation arising, it was then felt by the Zambia Library Association that the course should not run in isolation but be related to the library education programmes at the University of Zambia. This could best be done if UNZA served as external examiner for the Certificate course. With this in mind the ZLA delegated responsibility in 1985 to its Education and Training Committee to appraise the Certificate course and make necessary recommendations to the ZLA Council including the need for external examiners.[12]

RECOGNITION AND REMUNERATION OF LIBRARY PERSONNEL IN ZAMBIA

When we relate library education to library practice in Zambia, the scene is not very encouraging. It has been realized since 1975:

1. that the librarians' salaries in Zambia outside the University and a few other organisations, are not sufficiently high to offer attractive prospects to newly qualified librarians;
2. that the librarians have not received equal status in the Government with other professions.[13]

Some employers employ them as qualified librarians and others as administrative or technical staff with varying salary scales.[14] In some cases where librarians have been equated with other professions e.g. biologists, hydrologists, metallurgists, etc. they do not have a progression ladder or career structure like their counterparts in other professions.[15] All these anomalies have resulted in many enterprising librarians being lost to the profession as they seek more lucrative rewards elsewhere.[16]

Such a loss obviously calls for action by the library profession in Zambia to campaign for the recognition of the profession and estab-

lishment of salary scales equivalent to other professions of the same standing. This can best be achieved by high level representation from the UNZA, ZLA and employers of librarians to the Government of the Republic of Zambia. The representatives should collectively form a Committee with responsiblity to design a structure which would ensure that library personnel are accorded status and salary scales appropriate to the level of education and in line with other professions of equal standing in the country. Such a structure should then be presented to the relevant Government authority for approval.

What has been proposed above is not new. Recommendations such as the above were made in the past and Committees were established to seek solutions to the same problems. In 1980, for example, the Zambia Library Association's (Committee of) Standing Conference of Head Librarians of Zambia (SCOHLZA) submitted to the Government recommendations which included hierarchical structure and salary scales of professional, sub-professional and non-professional library personnel. But the Government did not approve SCOHLZA's recommendations.[17)]

Since the problems of recognition and remuneration are still with us, they cannot be ignored. Everything that needs to be done should be done to prevent confusion in the minds both of librarians and employers about the status and salary scales of library personnel at various levels in the country. The struggle for recognition and adequate remuneration should continue otherwise there is danger of frustration growing within the profession and employers facing more difficult task than necessary.

RELEVANCE OF LIBRARY EDUCATION

Statistical table showing number of libraries and trained library personnel in Zambia in 1983.

Type of Library	Main Libraries	Service points e.g. Branches, etc.	Staff with certificate, diploma, B.A.L.S. etc.
ACADEMIC	42	3	80
PUBLIC	24	15	58
SPECIAL	65	22	39
TOTAL:	131	40	177

Source: Nawa Mwiya. A Directory of Libraries in Zambia, 1983. (Unpublished)

The table above shows the presence of 131 libraries with 40 service points employing 177 trained library personnel in 1983. Needless to say that out of those 177 employed, the majority were found in three major library services i.e. UNZA Library, the Zambia Library Services and Mt. Makulu Research Station Library. In fact the 1983 Directory of Libraries in Zambia[18] listed 26 special libraries as being without any trained library manpower. Although no comprehensive recent library manpower survey of trained library personnel throughout the country has yet been undertaken, a mere observation of the situation in Zambian libraries indicates the need for qualified library personnel in all types of libraries.

In 1982 when the Department of Library Studies was thinking of mounting an MLS programme, it undertook a questionnaire survey to evaluate the need for a postgraduate programme in librarianship in Zambia. Out of the 50 carefully selected libraries which were sent questionnaires, 45 (90 %) responded, and of the 45 respondants 36 (80 %) indicated a strong need for a postgraduate programme in librarianship at UNZA. The 9 respondents (20 %) representing answers other than positive were split as follows: 8.8 % = No need; 4.5 % = Undecided; 6.7 % = No answer.

Of the affirmative responses, the distribution was as follows: 42.6 % = College Libraries; 25 % = Public Libraries; 13.5 % Research Libra-

ries; 11 % = Other Libraries; 5.4 % = University Libraries; 2.5 % Archives.[19]

The information above reflects the demand in general for library manpower in the country, but it does not show whether the output of our library schools satisfactorily meets the need of employers - the consumers of the product of our education system. Obviouly we need to know more than merely the fact that the demand for library manpower exists in the country. Indeed, we also need to know whether the quality of manpower we produce matches the requirements of jobs in the country. Whether the skills for which we provide training are the ones that are really related to the anticipated job requirements in the country. In other words we need to know not only about the quantity of trained library personnel but also about its quality. It is really the amount of knowledge available about the quality of library school output that should help us to determine the degree of relevance of library education programmes at various levels in the country.

In order therefore to evaluate the relevance of library education programmes, information needs to be gathered about both the number of trained personnel needed and about the skill and occupational structure of the information agencies in which they will work. Such information can best be obtained by a comprehensive national library manpower survey which should be so designed as to solicit reasonably accurate data concerning the total number of different categories of employment and the number and type of manpower needed to match these categories. With detailed information available from such a survey the library schools should be able to ensure not only equilibrium between supply and demand for manpower, but ensure also that the type of manpower they produce is relevant to the needs of libraries in the country.

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ANNEX I

GUIDELINES TO AUTHORS

regarding contributions to
"Librarianship and documentation studies:
a handbook of teaching and learning materials"

Brief background

The problem of lack of teaching and learning materials has been under discussion for a number of years now - at international and regional as well as at national levels. Meetings were held in Paris (1978), London and Arusha (1979), and Maseru (1980), all focussing in part or fully on this problem.

The German Foundation for Internatinal Development (DSE) embarked on solving partly the problem by convening a workshop in Berlin (West) in 1982, during which a first document, a reader titled "Library Training in Eastern, Central and Souther Africa", was compiled. About 300 copies of it were distributed to library and documentation training institutions and individuals in the mentioned region. In 1983 preparations started to publish supplements to this reader, this time consisting of genuine articles rather than choosing already published material. During the 1985 Information Experts Meeting in Harare the foundations were laid for a new series of handbooks of teaching and learning materials titled "Librarianship and Documentation Studies". Following volumes should be produced as soon as a sufficient number of articles can be put together, hopefully one volume each year.

Contributors

Every qualified person within or outside the sub-region is invited to send an article for inclusion in these series. Please indicate full name, qualifications, official designation and address.

The Editorial Board's decision with regard to the publication of any article is final.

Level of presentation

The articles are aimed at serving as basic teaching and learning materials at certificate and diploma levels. The level of language, and abstraction must therefore have this target audience in mind. It must also be borne in mind that although the primary language of publication is English, to most of the intended audience this is not their mother tongue.

Subject coverage

It is intended that the documents thus produced are to be used as teaching and learning materials in the Eastern, Central and Southern African region. Intending authors should therefore discuss their subject in the context of this region, and illustrate their points with examples relevant to this geographical area.

In general all topics taught at certificate and diploma levels may form the subject content of articles. Coverage should not be limited to traditional library science topics but may include modern concepts found in Information Science, and Computer Sciences.

Presentation of manuscripts

Manuscripts should be type written on one side only of Standard A4 paper. Double spacing should be used throughout and adequate margins left on both sides of the paper. Papers should be consequently numbered.

The paper should start by showing what is the importance of the topic or concept being discussed. This should be followed by a statement of what is expected the student will learn from this paper. The main body or text of the paper should be terminated by a brief resume or summary of points discussed, or the author's opinion of how the problems raised in the paper can be solved.

Bibliographical references

All works or individuals used in the preparation of the paper should be cited at the end of the paper. The use of notes at the end of the page should be avoided. References should follow closely ISO 690 - 1975.

See following examples:

BOOKS.

Jones, J.V.S. Resources and Industry in Tanzania: Use, Misuse, and abuse. Dar es Salaam: Tanzania Publishing House, 1982. 242 p. ISBN 9976 1005 1

Contributors to collected works

Sewell, Phillip H. Standards, norms and targets: problems of international comparison. In: Parker, J. Stephen. ed. Aspects of library development planning. London: Mansell, 1983. 289 p. ISBN 0-7201-1661-9.

Periodical articles

Benoit, Marie. Training Library Assistants in Mauritius. Unesco Journal of Information Science, Librarianship and Archive administration, 3(4). Oct.-Dec. 1981, 222-226.

Payment

Contributors of articles will receive a payment of DM 150,-- on publication of their article. Authors will receive a letter of acceptance of the article and be advised how payment will be realized.

Submission

All contributions should be submitted to any of the following members of the Editorial Board:

1. Mr. James M. Ng'ang'a
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   Kenyatta University
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   Nairobi/KENYA

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ANNEX II

Information

DEUTSCHE STIFTUNG FÜR INTERNATIONALE ENTWICKLUNG
German Foundation for International Development
Education, Science and Documentation Centre
Information and Documentation Training Section

THE PUBLICATIONS IN INFORMATION AND DOCUMENTATION

In connection with its Information and Documentation Training Programmes DSE published reports and other documents in the fields of Librarianship, Documentation and Archivs since many years. The following publications are still available and may be ordered free of charge by clearinghouses, training institutions, national library services and associations (and individuals, if related to their working situation or otherwise justified):

DOK 1347 A/a Co-ordination and Improvement of National Information Services, Mbabane and Maseru Workshop Papers; Mbabane 24 - 28 Feb., 1986; Maseru 3 - 7 March, 1986 (232 pages)

DOK 1346 A/a Use of Computers in Information Handling, Training Workshop; Nairobi 21 April - 2 May, 1986 (138 pages)

DOK 1345 A/a The Impact of DSE/ESAMI Training Programmes, Course Report; Arusha 21 - 25 October, 1985 (71 pages)

Working Document Sturges/Dimbungu/Neill/Thapisa: Introduction to Librarianship and Documentation, Pilot Edition; (208 pages)

DOK 1311 A/a Trade Information Services, Seminar Papers; Arusha 22 April - 3 May, 1985 (100 pages)

DOK 1310 C/a Librarianship and Documentation Studies: A Handbook of Teaching and Learning Materials; Volume 1 (1985); (134 pages)

DOK 1309 A/a Manpower Training Needs, Proceedings and Papers of the Information Experts Meeting; Harare 18 - 21 March, 1985 (159 pages)

I&D Working Paper No. 2 Country and Institution Progress Reports (Supplement to DOK 1309 A/a) (45 pages)

DOK 1308 A/a Establishment, Function and Management of a National Library and Documentation Service, Workshop Report; Harare 6 - 15 March, 1985 (182 pages)

DOK 1245 A/a Management of National Documentation Centres, Malawi Workshop Papers; Blantyre 6 - 14 March, 1984 (95 pages)

DOK 1244 A/a Information Services for Rural Development and Industry, Workshops Papers; Arusha 3 - 7 Oct. and 10 - 21 Oct., 1983 (75 pages)

DOK 1187 A/a Budgeting and Financial Planning, Papers and Proceedings of the Information Experts Meeting; Arusha 23 - 27 May, 1983 (120 pages)

DOK 1185 A/a Management of Information Services, Workshop Papers; Arusha 9 - 20 May, 1983 (94 pages)

Working Document Library Training in Eastern, Central and Southern Africa: A Reader; Berlin (West) 1 - 9 Sept., 1982 (467 pages)

Working Document Health Science Library Mangement and Cooperation, Course Report; Arusha 16 July - 7 Aug., 1982

All publications can be ordered from:

DSE Bonn
Publications Section
Postfach 300 380
5300 Bonn 3
Federal Republic of Germany

SPECIAL ANNOUNCEMENT

Information Technology and Information and Documentation Problems of India - A Collection of Papers

One of our German partner institutions, the training division of the "Gesellschaft für Information und Dokumentation (GID)" has recently compiled a collection of materials related to information technology plus information and documentation problems of a developing country, namely India. The collection is comprised of 75 articles and papers grouped into eight subject fields; entries until the end of 1985 were considered.

Interested professionals, especially if attached to library training institutions, are invited to request

a) content pages of the collection free of charge from:

Gesellschaft für Information und Dokumentation
GID-Kolleg
Herriotstr. 5
6000 Frankfurt 71
Federal Republic of Germany;

b) copies of specific articles or papers needed for educational purposes from:

Gesellschaft für Information und Dokumentation
GID-IZ
Lyoner Str. 44-48
6000 Frankfurt 71
Federal Republic of Germany.

We should be pleased if our readers made use of this opportunity!

Druck: Unikopie, Bornheimer Str. 80, 5300 Bonn 1